

FOSTERING A GROWTH MINDSET: ELEMENTARY TEACHER EXPERIENCES USING
MINDFULNESS PRACTICES

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ALYSSA KLUK

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Abstract

The purpose of the present study was to explore the experiences of eight elementary school educators in Saskatchewan using mindfulness within their classrooms, and their ideas as to how mindfulness can impact the children's body esteem. The present study utilized a thematic analytical research design using semi-structured interviews to explore teachers' observations about using mindfulness practices with their students. A Four-Component Theoretical Model of Mindfulness (Hölzel, Lazar, Gard, Schuman-Olivier, Vago, & Ott, 2011) contextualized the analysis of the data generated from the participant interviews. Six major themes emerged from the interview data: (1) The Minds of Mindfulness: MindUp, Tech-Minded, and the Creative Mind, which described the types of formal and informal mindfulness programming that Saskatchewan-based teachers were using in their classrooms; (2) Tools in the Toolbox: Kids' Personal Use of the Language and Techniques of Mindfulness, which focused on the spontaneous use of the mindfulness principles and emotional language learned within the classroom as it is applied to other contexts, and the ability of the students to grasp the concepts of mindfulness and use it independently; (3) Capability and Confidence, which described how mindfulness impacted the students' mindset by helping them to focus on their abilities and possibilities for growth, rather than on fixed concepts, such as their physical appearance; (4) Differences and Diversity: How They Affect Body Image, which centred on how the participants viewed differences in race, culture, and sexuality as stronger contributing factors to body image than the traditional factors of weight and shape; (5) Teacher Talk: How Teachers Aren't Hearing About Body Image in Their Young Classes, which focused on the participants' lack of awareness of any body image issues in their young children, with students only beginning to talk to teachers about any negative perceptions of their bodies in the upper age range of this study (i.e., Grade 4 and 5); and (6) The Drawback Duo and the Benefit Bunch, which described the main drawbacks (i.e., time away from curriculum and initial scepticism from the children) and benefits (i.e., better focus, calmer students) of using mindfulness practices with their students.

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Chapter 1: Introduction

The concept of *mindfulness*, which is exploding in both scholarly research and Western culture, has its roots in the word *sati* from the Pali language meaning *to remember* and translates into the Western understanding of *presence of mind* (Brown, Ryan, & Creswell, 2007). Other authors have agreed that mindfulness involves being aware of the present moment, but they add the important distinction of being nonjudgmental toward one's current self and thoughts (Bluth, Roberson, & Gaylord, 2015). Mindfulness is beginning to find a place in today's classrooms as it grows in popularity in the Western world due to its secularization and modernization (Saskatchewan Ministry of Education, 2010a; Saskatchewan Ministry of Education, 2010b; Zenner, Herrnleben-Kurz, & Walach, 2014). Mindfulness is an ancient practice founded out of the religious practice of Buddhism, of which many individuals in Western culture do not practice. Western practice removes much of the Buddhist teaching and replaces it with a focus on attention and well-being, which people can embrace regardless of their spiritual worldview (Stratton, 2015).

When mindfulness is taught to children and youth, participants are directed to examine their current internal experiences with kindness and curiosity (Viafora, Mathiesen, & Unsworth, 2014). Research in mindfulness programs with elementary aged students has centred on improving attention in the classroom, and has been associated with reductions in symptoms of depression and anxiety, even after only participating in programs for 6 to 8 weeks (Black & Fernando, 2013, Flook et al., 2013; Napoli, Krech & Holley, 2005). In the Saskatchewan curriculum, mindfulness programming is being implemented for children as young as 7 years of age (Saskatchewan Ministry of Education, 2010). One area that has not been extensively studied in the literature is the use of mindfulness practice in providing elementary-aged children with strategies to ameliorate negative attitudes related to having poor body image (Atkinson & Wade, 2015; Burke, 2010).

Body image anxiety can be defined as an internal reaction to an individual's cognitive schema of their appearance (Altabe & Thompson, 1996; Meichenbaum, 1977). A cognitive schema helps an individual to organize and interpret information of how they view their bodies (Piaget, 1964). This means that individuals experiencing body image anxiety may hold negative

thoughts and feelings about the way they look by default. The way children view their bodies is organized within such a schema (Gallagher, 1986), and it has been argued that *body schema* and *body image* are distinct terms (de Vignemont, 2010). de Vignemont (2010) asserted that body image implies more conscious thought and contemplation toward one's body, while a body schema is more of a shortcut in a sense, in which the conceptualization of the self is not abstract, but concrete and holistic. The body image concept can be changed based on the situation, while a person's body schema requires more work to change on a whole. Unfortunately, children seem to be developing these deleterious and hard-to-change body schemas earlier than ever (Dohnt & Tiggemann, 2006; Lawrie, Sullivan, Davies, & Hill, 2007; Tiggemann & Slater, 2013).

Social media platforms have increased exposure to idealized depictions of the *perfect* body by their peers, as applications such as Instagram, Facebook, and Snapchat are easily accessed on a daily basis using cell phones, iPads, and desktop computers (Strasburger et al., 2013). Middle school and high school girls using Facebook, for example, have reported higher thin ideal internalization, weight dissatisfaction, drive for thinness, and self-objectification after viewing pictures and messages from other girls on this social media platform (Meier & Gray, 2014). Adolescent girls reported feeling the same pressures and negative effects, with greater dissatisfaction being correlated with the amount of time spent on these platforms. The girls explained that exposure to these platforms has been linked to increased body surveillance, or monitoring of their own bodies and thinness (Tiggemann & Slater, 2013). The age of access to social media platforms is typically 13 years of age, but children can falsify their age to get access to these sites earlier (O'Keeffe & Clarke-Pearson, 2011). Body dissatisfaction is being documented in children as young as 7 to 9 years of age, or beginning in the second grade (Heron, Smyth, Akano, & Wonderlich, 2013). This has manifested clinically in the form of disorders such as depression and anxiety, which have both been related to poor self-concept (Harriger & Thompson, 2012; Nicholls, Lynn, & Viner, 2011).

It is important for educators and helping professionals (i.e., school psychologists, counsellors) to assist children in developing healthy self-perceptions and create barriers from external pressure from their peers on social media or in person (Reulbach, Ladewig, Nixon, O'Moore, Williams & O'Dowd, 2013). Currently, the Grade 2 Saskatchewan curriculum focuses children's attention to their inner selves by using mindfulness principles to encourage kindness and self-compassion (Saskatchewan Ministry of Education, 2010a). In Grade 3, mindfulness

practices continue to foster bodily acceptance by teaching children that their inner selves are more important than their external appearances (Saskatchewan Ministry of Education, 2010b). Despite the current use of mindfulness within school curricula, no studies to date have examined the changes in body esteem that elementary students are experiencing through use of mindfulness practice. Rather, mindfulness has been primarily studied in the context of clinical disorders in children, such as depression, anxiety, and adolescent eating disorders (Atkinson & Wade, 2015; Harriger & Thompson, 2012; Nicholls, Lynn, & Viner, 2011). It appears that formal mindfulness programming is most often implemented as a reactive measure, leaving its potential preventive benefits mostly unexplored (e.g., Proulx, 2006).

There is reason to believe that mindfulness can be effectively used to promote benefits including reductions in weight and shape concern, dietary restraint, thin-ideal internalization, and psychosocial impairment before the onset of a clinical disorder in adolescents (e.g., Atkinson & Wade, 2015). In adults, mindfulness programming has had a positive impact on improving prosocial behaviour, which manifested as an increase in acts of helpfulness when playing competitive computer games (Birnie, Speca, & Carlson, 2010). When practiced regularly, it was also linked to greater levels of self-compassion in the form of modeling using more positive words about oneself (Condon, Desbordes, Miller, & DeSteno, 2013; Wheeler, 2015).

Exploring further, Schonert-Reichel and colleagues (2015) contrasted a mindfulness program with a traditional curriculum-based social responsibility program targeted towards four classes of fourth and fifth-grade students. The children that participated in the mindfulness-based program were rated higher on empathy, perspective-taking, optimism, self-concept, and emotional control and were rated as being more prosocial and accepted by classmates. Additional biological measures of salivary cortisol also showed more significant stress reduction effects than those children in the traditional program. These findings supported mindfulness as being more effective in improving self-concept, which is fundamental to the concept of body image, emotional self-regulation, kindness to others, and lower levels of stress than traditional classroom-based programming that is currently being delivered in schools. These findings stress exploring mindfulness practices within schools could be beneficial in informing future body image initiatives.

1.1 Statement of Purpose

The aim of this study was to: describe how formal (i.e., guided programming and curricula) and informal mindfulness practices (i.e., yoga, movement-based meditation, mindfulness games) in elementary schools in Saskatchewan are used; discuss the personal experiences of teachers using mindfulness in their classrooms; and explore teachers' understanding of the impact of mindfulness on the body image of young children. Specifically, the following research questions were posed:

1. What are the experiences of teachers administering mindfulness practices to elementary-aged children? and
2. What qualities of mindfulness do teachers believe are helping children to improve their self-esteem and body image?

1.2 Definitions

For the purpose of providing greater clarity, the following terms have been defined.

1.2.1 Mindfulness. The ancient concept of mindfulness has been transformed into the modern translation of *mindfulness*, which derives from the Pali language word *sati*, which means *to remember, to recollect, or to bear in mind* (Brown, Ryan, & Creswell, 2007). The true meaning, however, extends beyond simply memory and references deeper concepts such as *thoughtfulness* and *constant presence of mind* (Rhys Davids, 1881).

A less abstract definition of mindfulness and *presence of mind* was provided by Jon Kabat-Zinn (1994), who explained mindfulness to be the act of “paying attention in a particular way; on purpose, in the present moment, and non-judgmentally” (p. 4). Through this definition, mindfulness is illustrated as the process of maintaining attention on immediate experience, while taking an orientation of openness, acceptance, and curiosity (Bishop et al., 2004).

1.2.2 Informal mindfulness practices. Informal mindfulness practice is the *mindfulness of everyday activities* (Hanley, Warner, Delihi, Canto, & Garland, 2014). It is typically defined as the act of bringing mindfulness principles into day-to-day activities, such as paying attention while doing the dishes or focusing on the tastes and textures of food while eating (Hindman, Glass, Arnkoff, & Maron, 2015). However, informal mindfulness practices more broadly encompass any method that fosters an accepting attitude toward present-moment experiences (Bishop, Lau, Shapiro, Carlson, Anderson, Carmody, & Devins, 2004). For the purposes of this study, informal mindfulness practices will encompass any activity that promotes awareness of the

present moment without clear structure, such as adaptations to yoga-based meditation (movement based practice), the use of tools to help draw attention to the breath, and other activities that promote focus on the present moment (Hanley et al., 2014).

1.2.3 Formal mindfulness practices. Formal mindfulness practices typically involve structured activities, often focusing on the mindfulness of the breath (Hanley, Dehili, Canto, & Garland, 2014). Formal meditation practices are learned within structured sessions and instruction, with assigned practice to build on learned skills, otherwise known as a curriculum (Hindman, Glass, Arnkoff, & Maron, 2015). These structured sessions include the regular and/or guided practice of meditation, yoga, Tai Chi, and/or mindfulness-based stress reduction, as popularized by Jon Kabat-Zinn (Kabat-Zinn, 1994). For the purposes of this study, formal mindfulness practice will be defined as structured activities focusing on the mindfulness of the breath, typically within a given amount of time (i.e., 8 weeks as per the BREATHE program; Bluth, Roberson, & Gaylord, 2015), and/or a prescribed curriculum..

1.2.4 Self-concept. Self-concept refers to how an individual thinks about or perceives themselves and the attributes that make the self, otherwise known as a general awareness of oneself or self-image (Baumeister, 1999). Self-concept also encompasses how much value the individual places on themselves (self-esteem) and the objective observation of the discrepancy between the ideal self and the true self (McLeod, 2008; Rogers, 1959).

1.2.5 Self-esteem. Self-esteem exists under the umbrella of self-concept (Rogers, 1959). It is one's perception or belief of themselves, and consists of appraisals of such constructs as their own appearance, emotions, behaviours, and values, which contribute to the person's general sense of worth or value (Cherry, 2016). To clarify, self-esteem may partially derive from one's appraisal of their appearance; however, self-esteem is generally established from the appraisals of multiple constructs and is not directly linked to appearance. As one of Maslow's (1987) concepts that contribute to his hierarchy of needs, every individual is motivated to achieve self-esteem from a variety of sources.

1.2.6 Body esteem. Body esteem refers to an individual's self-evaluations of their own body or appearance that contribute to personal feelings of worth or value (Mendelson, Mendelson & White, 2001). It is one component that contributes to overall self-esteem (Cherry, 2016).

1.2.7 Body image. Body image is often considered interchangeably with body esteem, as traditional definitions of the term are quite similar to that of body esteem (Grogan, 2008; Neagu,

2015). The slight difference between body image and body esteem, however, has to do with the placement of value. Body image is more of an objective cognitive perception of oneself, while body esteem refers to the contributions to personal worth and value that derive from this perception of oneself (Neagu, 2015).

1.3 Significance of the Study

Recent research has demonstrated that children are becoming aware of societal expectations for an ideal body, and of the discrepancy between this expectation and their own bodies, by the ages of 6 and 7 years old or Grade 1 and 2 (Heron et al., 2013). The echoes of this phenomenon have been heard across the globe, with studies from overseas supporting the literature found in the Western world reporting body dissatisfaction in elementary-aged students (Brixval, Rayce, Rasmussen, Holstein, & Due, 2011). While a few studies investigating eating disorders in adolescents have been conducted (Broderick & Metz, 2009; Safer et al., 2007), this area of research is virtually nonexistent within elementary-aged students and subclinical populations of children experiencing higher levels of body dissatisfaction falling under the radar of an eating disorder. Mindfulness programming has demonstrated success in improving the self-concept of those participating in regular and semi-regular sessions (e.g., Schonert-Reichel et al., 2015). Therefore, examining the novel use of mindfulness interventions within the Saskatchewan curriculum may help to shape future body esteem programs. Gathering the insights of teachers using formal or informal mindfulness practices will provide a preliminary snapshot of their experiences with using mindfulness to help improve the confidence and body esteem of elementary school children.

1.4 Chapter Organization

In Chapter 2, literature related to mindfulness practice and body esteem are reviewed and organized into two major sections: the common uses and theoretical underpinnings of mindfulness, and the body image concerns of students. The methodology of this study is outlined in chapter 3, while chapter 4 presents the study's results. Finally, in chapter 5, the results are discussed with a focus on implications for practice and research, strengths and limitations of the study, and overall conclusions from the current study.

Chapter 2: Literature Review

This review of the literature related to the use of mindfulness practices addressing body image concerns is divided into two major sections. Section one discusses and critically reviews the theoretical underpinnings of mindfulness and how it is commonly used with adults and youth. In particular, a Four-Component Model (Höltzel et al., 2011) is offered as an explanation for how mindfulness practice can restructure the thoughts of the people that practice them. Section two discusses and critically reviews literature related to the body image concerns of adolescent and elementary aged students, and highlights the current use of mindfulness in treating eating disorders and body esteem issues in these and adult populations.

2.1 Mindfulness

The modern mindfulness practice that is enjoyed in the Western world is derived from ancient Buddhist teachings with the purposes of allowing those who practice to *know* their mind, to *train* their mind, and to *free* their mind (Frondsal, 2006). It is a process of discovery in which a person deliberately and consciously chooses to become acquainted with their thoughts as they come, to train their mind to be kinder and more compassionate, and to learn to let go of what no longer serves them (Chiesa, 2010; Frondsal, 2006). The modern Western definition of mindfulness frames this process as developing a mental skill or state that arises with regular practice in “paying attention in a particular way, on purpose, in the present moment, and non-judgmentally” (Kabat-Zinn, 1994, p. 4).

Several disciplines utilize the principles of mindfulness by linking thoughts to sensations and postures within the physical body, such as yoga, tai chi, and qigong (Walsh & Shapiro, 2006). More recently there have been adaptations of mindfulness in the form of structured, formal programming like mindfulness-based stress reduction (MBSR), which combine the counselling practices of cognitive-behaviour therapy (CBT) with mindfulness meditation (e.g., Gu, Strauss, Bond, & Cavanagh, 2015). Technology has also contributed to perpetuating mindfulness practice by allowing for phone and computer applications to reach participants on a mobile basis through media such as videos and recordings (e.g., Mindshift; AnxietyBC, 2016).

Mindfulness practice in its many forms is correlated with improvements in reduced rumination (e.g., Chambers, Lo, & Allen, 2008); stress reduction (e.g, Williams, 2010); working memory (e.g., Jha, Stanley, Kiyonaga, Wong, & Gelfand, 2010); focus (e.g., Moore & Malinowski, 2009); emotional reactivity (e.g., Ortnier, Kilner, & Zelazo, 2007); and cognitive

flexibility (e.g., Cahn & Polich, 2006). These benefits have attracted a wealth of research and theorists to postulate why mindfulness brings about improvements (e.g., Grabovac, Lau, & Willett, 2011; Jankowski & Holas, 2014; Olendzki, 2010).

2.1.1 Theories related to the mechanism of mindfulness. There have been a number of theories that attempt to explain the complexities of mindfulness practice and how it imparts change in those that practice (e.g., Kerr, Sacchet, Lazar, Moore, & Jones, 2013; Lutz et al., 2008; Olendzki, 2010). Four theories were identified as a potential framework for understanding how mindfulness may produce a positive change in the students and educators using it in terms of body image and beyond: (1) the Metacognitive Model of Mindfulness (Jankowski & Holas, 2014); (2) the Buddhist Psychological Model of Mindfulness (Grabovac, Law, & Willett, 2011); (3) Hölzel et al.'s (2011) Four-Component Theoretical Model, and (4) Monitor and Acceptance Theory (Lindsay & Creswell, 2017).

2.1.1.1 Metacognitive model of mindfulness. Metacognition, as it appears in definitions of mindfulness (Kabat-Zinn, 2003), is a state of consciousness resulting from awareness of continuous changes in the content of consciousness, which consists of perceptions, emotions, images, and thoughts. Jankowski and Holas (2014) emphasized that mindfulness works through altering metacognition by adapting the metacognition framework suggested by Efklides (2008). In other words, they propose that mindfulness works by altering the way individuals think about and monitor their current consciousness in terms of perceptions, emotions, images, and thoughts. Their metacognitive model of mindfulness involved five main hypotheses. First, it is inherent that metacognitive, multilevel information processing occurs within a mindfulness state (Efklides, 2008). The model suggests that the act of mindfulness promotes an automatic process in which individuals begin to observe their thoughts, sensations, perceptions and emotions and become aware of discrepancies between their current and ideal states of consciousness. Second, remaining in a mindfulness state necessitates the activation of three components of metacognition: metacognitive knowledge (i.e., how individuals know to think and act in various situations), metacognitive experiences (i.e., the understanding and judgment of emotions that accompany various tasks or situations), and metacognitive skills or how an individual understands their current state (e.g., emotion), their ideal state (e.g., to be happy) and the discrepancy between the two (e.g., I feel nervous but I want to be calm) (Efklides, 2008). These components work together to influence how a given situation is experienced by the individual.

Third, practicing mindfulness intentionally helps the individual to reduce the discrepancy between desired states and current states (e.g., to move perceptions, emotions, and thoughts more in line with the desired outcome). Fourth, consciousness has a genuine impact on a person's experience and can truly affect outcomes. Fifth, components of mindful metacognition change with continuous practice (Efklides, 2008). Essentially, monitoring ability is increased and made more efficient through regular practice of observing one's sensations, perceptions, emotions, and thoughts in the present moment in different contexts. Body image is a conscious view of oneself based on different factors such as appearance and capability (Grogan, 2008; Neagu, 2015) and can work across a variety of situations.

2.1.1.2 Buddhist psychological model of mindfulness. The Buddhist Psychological Model of Mindfulness (BPM) pays homage to the Buddhist roots of mindfulness and meditation, with its authors' claim that it is the only way to sufficiently describe the change process that mindfulness facilitates (Grabovac, Lau, & Willett, 2011). This model differs from the Metacognitive Model of Mindfulness (Jankowski & Holas, 2014) in the sense that there is no distinction made between the awareness brought to sense impressions, like physical sensations, and the cognitions that correspond to these sensations. This removes the metacognitive autonomy of choice in how to react to a given sensation (Grabovac, Lau, & Willett, 2011).

The BPM model rather postulates that attention is limited, and that an individual can only be aware of one object, sensation, thought, or emotion at a time. Each of these events come quickly and passes away quickly in rapid succession. Each object can be pleasant, unpleasant, or neutral, but people tend to want to pursue those that are pleasant (attraction) and avoid those that are unpleasant (aversion). The model ultimately hypothesizes that mindfulness meditation works when individuals habitually focus on more pleasant thoughts and avoid more unpleasant thoughts over time and practice. For example, they propose that a mental event, such as a feeling of calmness, can arise from a breathing exercise. This pleasant event is attractive, and therefore, it tends to be habituated and focused on by the participant (Lutz, Slagter, Dunne, & Davidson, 2008).

In terms of acceptance, the BPM also posits that since thoughts and emotions are so fleeting, the observer eventually learns that pleasant and unpleasant experiences are fleeting, and thus decreases their sensitivity to each object that finds its way into consciousness. Therefore, an

attitude of greater acceptance in one's ideas as simply fleeting moments in time is perpetuated and less concentration is paid to negative ideas as a whole (Grabovac, Lau, & Willett, 2011).

2.1.1.3 Hölzel et al. (2011) four-component theoretical model. In 2011, there was a notable lack of comprehensive theoretical frameworks for the mechanisms of mindfulness (Hölzel, Lazar, Gard, Schuman-Olivier, Vago, & Ott, 2011). They found that the concepts that have been identified as a mechanism for action through which mindfulness facilitates change, included: (1) attention regulation (e.g., Lutz et al., 2008); (2) body awareness (e.g., Kerr et al., 2013); (3) emotion regulation, including reappraisal of emotions and exposure, extinction, and reconsolidation of emotions (e.g., Grabovac et al., 2011); and (4) change in perspective on the self (e.g., Olendzki, 2010). Hölzel et al.'s (2011) model encompasses these four concepts that were identified individually, however, they propose that mindfulness truly works through a dynamic interweaving of all four concepts working together to impart change. Specifically, they posit that all four components work closely to constitute a process of enhanced self-regulation (Carver & Scheier, 2011; Vohs & Baumeister, 2004).

Attention regulation is essential to mindfulness practice in order to focus the thoughts on the present object or circumstance and to avoid thoughts in conflict. Regular practice decreases the amount of time spent on thought intrusions rather than the object to be focused on. As defined by Jankowski and Holas (2014), an object is any event that occurs within consciousness, such as a thought, perception, emotion, or sensation. Body awareness is the ability to notice subtle bodily sensations (Mehling et al., 2009), and is often the object of focus in most mindfulness meditation practices (i.e., sensory experiences of breathing, sensory experiences related to emotions, bodily sensations at the current moment). Hölzel et al. (2011) posited that an increased awareness to the body's reaction to an emotional stimulus leads to an understanding of the basis of those emotions, which can then be altered. Emotion regulation is impacted by regular mindfulness practice through allowing for reappraisal of emotions through awareness of bodily sensations and the fleetingness of thoughts, as well as through repeated exposure to unpleasant objects, which leads to an extinction of the negative response in a classic behavioural scenario (e.g., when you remove the presence of food following a ringing of a bell, the dog will no longer salivate at the bell). Finally, meditation over time draws attention to one's thoughts, which results in increasing clarity and ability to resolve feelings.

2.1.1.4 Monitor and acceptance theory (MAT). The Monitor and Acceptance Theory (MAT) of mindfulness provides an explanation for its effects on cognition, emotional affect, stress, and health outcomes (Lindsay & Creswell, 2017). The two core tenets consist of: (a) Attention Monitoring and (b) Acceptance. Attention monitoring skills enhance the individual's awareness of present-moment experience. They posited that mindfulness meditation provides training in conflict monitoring skills, which is the ability to remain focused on a desired object while ignoring distracting stimuli. In essence, mindfulness provides an object to focus on (e.g., the postural position of the body in the present moment during yoga), so that other distracting and potentially negative thoughts, cognitions, emotions, or perceptions are not the focus (Malinowski, 2013).

Attention Monitoring Skills mediate the improvement of cognitive functioning outcomes by enhancing awareness of objects (thoughts, perceptions, emotions, or sensations) in relation to the present situation (Lindsay & Creswell, 2017). The researchers noted that the tendency to monitor, or observe, one's current situations and sensations is related to stronger cognitive and creative performance (e.g., Moore & Malinowski, 2009). At its core, attention monitoring heightens affective experience and can enhance positive experiences and exacerbate negative experiences, which is why attention monitoring on its own is not sufficient to regulate emotions (Lindsay & Creswell, 2017).

In order to regulate emotions, Attention Monitoring Skills must occur in tandem with the second core tenet: Acceptance. Acceptance is a central core to mindfulness meditation teaching and is defined as a mental attitude of openness, receptivity, equanimity, and an absence of judgment toward one's experiences and sensations (Baer, Smith, & Allen, 2004). Acceptance skills that come out of regular mindfulness practice include non-reactivity, non-judgment, and acceptance without judgment. When practiced, mindfulness meditation occurs when individuals can monitor their thoughts, sensations, and perceptions, and accept the thoughts as simply thoughts. Eventually, increased awareness of one's thoughts as fleeting reduces reactivity to previously negative stimuli (Lindsay & Creswell, 2017).

2.1.1.5 Comparison of theories. The Metacognitive Model of Mindfulness (Jankowski & Holas, 2014), the Buddhist Psychological Model of Mindfulness (Grabovac, Law, & Willett, 2011), Hölzel et al.'s (2011) Four-Component Theoretical Model, and the Monitor and Acceptance Theory (Lindsay & Creswell, 2017) all provide a potential explanation for the

mechanism of mindfulness to impart change in its participants. The Metacognitive Model of Mindfulness (Jankowski & Holas, 2014) explains how mindfulness works in various situations where there may be a metacognitive discrepancy between current states (e.g., dissatisfaction with one's body) and ideal states (e.g., a positive view of one's body) and explains in detail why the changes in metacognition occur at the separate levels. However, only examining metacognition places too much of an emphasis on the change in the children's thinking and not enough on the experiences of the educators in using mindfulness. The Buddhist Psychological Model of Mindfulness (Grabovac et al., 2011) honours the religious background of mindfulness, which may not be appealing to all individuals that do not practice Buddhism. Additionally, this theory is not applicable, as this model doesn't adhere to the idea of having set mental schemas that remain stable. However, body image is defined as a relatively stable construct, which involves conscious thought and the existence of a set mental schema (Neagu, 2015). The BPM refers to thoughts too passively to account for such a model. The Monitor and Acceptance Theory (MAT, Lindsay & Creswell, 2017) is the most recent theory of the four and relatively simpler than the other three, however, is elegant in its simplicity. Lindsay and Creswell (2017) provided a mechanism for how mindfulness practice can affect cognition, emotional affect, stress, and health outcomes in a variety of mindfulness practices (i.e., formal curricula and informal programming) due to its simplicity in uncovering the central two tenets underlying all mindfulness practice: attention to the present moment and acceptance. Despite these strengths, however, Hölzel's (2011) Four-Component Model was chosen for the theoretical framework of the current study. Although less detailed than the other models presented, Hölzel et al.'s (2011) model encompasses the theoretical findings of all of the models and discusses how they work in tandem to impact an individual's cognitions. Therefore, this model appears to be the most complete in terms of mindfulness working to produce change in those that participate and can best explain the multitude of themes that arose in data analysis. Additionally, this theoretical model may help to explain the results of the literature on mindfulness with adults and youth alike.

2.1.2 Mindfulness with adults. Mindfulness practice is rooted in ancient meditation regimes and has been moulded into the modern, movement-based programs that we see today. Although teen and child yoga classes (e.g., YogaKids) are making their way into the majority of yoga studios around the world, the vast majority of consumers are still adults (Wenig, 2014). For those adults practicing, the benefits seem to be plenty, including greater self-compassion, well-

being, stress reduction, and drops in levels of depression and anxiety (e.g., Birnie & Speca, 2010; Christopher, Christopher, Dunnigan, & Schure, 2006; Gu, Strauss, Bong, & Cavanagh, 2015; Neff & Germer, 2013).

Mindfulness-based cognitive therapy (MBCT) and mindfulness-based stress reduction (MBSR) are hybrid programs that have been linked to reductions of negative symptoms and thoughts by increasing non-judgmental acceptance and overturning repetitive negative thinking (Gu, Strauss, Bond, & Cavanagh, 2015). Miksch, Lindeman, and Varghese (2015) posited that mindfulness is also connected to improvements in self-awareness, self-regulation, and self-transcendence for those practicing.

Christopher et al. (2006) suggested that mindfulness could be taught to an adult population to reduce stress and change their personal lives for the better. They utilized a structured focus group approach that taught formal mindfulness meditation strategies. It is important to note that the groups were self-selected, as each individual was given a choice to either take part in meditation, yoga, qigong, or tai chi, which they practiced individually 45 minutes a day for 4 days a week, and met weekly for a class in their chosen iteration. Therefore, it is difficult to make conclusions about the results of attending mindfulness programming, as selection was not random and each participant had too great of self-control for standardization. Despite these shortcomings, the researchers stressed the importance of self-care for university students, or time spent doing enjoyable or calming activities like mindfulness.

Training in mindfulness is beginning to branch out to reach different types of practitioners, including counsellors and teachers (Flook, Goldberg, Pinger, Bonus, & Davidson, 2013; Jennings, Frank, Snowberg, Coccia, & Greenberg, 2013; Roeser, Skinner, Beers, & Jennings, 2012). As mentioned in Christopher et al.'s (2006) study, they trained their counselling student participants in the arts of yoga, meditation, and qigong as culturally-diverse and popular methods of mindfulness practice. Yoga, and qigong are both movement-based practices, however, qigong also has a martial arts component. Meditation is practiced while the participant is still and can focus on the present moment (Christopher et al., 2006). Each of the students found that not only did this training make them feel more confident in their clinical expertise, but also brought about significant changes in their personal stress levels, as measured by self-reports and interviews. However, the report was vague in reporting its results, and further research is necessary if these claims will be supported.

Flook et al. (2013) piloted a modified mindfulness-based stress reduction program for teachers lasting 8 weeks, with 26 hours of group practice and a heavy solo component with guided recordings for meditative support. Participating teachers exhibited significant reductions in negative psychological symptoms, burnout, and stress, as per self-report questionnaires and biological salivary cortisol samples. Production of cortisol indicates the presence of stress in the body. The teachers provided both self-reports and salivary samples prior to programming and following programming. They also reported increases in attentiveness and self-compassion, which is a crucial component of body image. Increases in attentiveness and self-compassion are congruent with the components of Hölzel et al.'s (2011) four-component theoretical model, particularly with the reaching the first stage (attention regulation) and the fourth stage (a change in perspective of the self). While causation cannot be drawn from this correlational study, particularly since this is the first iteration of this given program, adding the biological measure of cortisol added a more objective observation of stress reduction than can be provided by self-reports, where participants might report higher levels of calmness due to a confirmation bias. However, one criticism for using a salivary cortisol technique is that cortisol naturally fluctuates in the body, and therefore changes in cortisol levels can be attributed to a wide variety of stimuli, such as eating a meal, sleeping, exercise, and others (Chan & Debono, 2010; Lovallo, Farag, Vincent, Thomas, & Wilson, 2008).

Jennings et al. (2013) took a slightly different approach than Flook et al. (2013) by presenting mindfulness programming to teachers as an intensive 30-hour program over a span of four days, rather than over a period of 8 weeks. As mentioned earlier, shorter programs than the typical 8-weeks as pioneered by MBSR programs, have not been thoroughly examined for long term stress-reduction benefits and have typically only been involved in pilot studies, of which Jennings et al.'s (2013) study is itself (i.e., 5 weeks as in et al., 2014, and 6 weeks, as in Lau & Hue, 2011). They found that this intensive programming resulted in the same improvements relative to stress and burnout and provided an additional benefit of increased perceived efficacy in doing their job, as measured by four psychometric scales (the Positive and Negative Affect Schedule, Watson & Clark, 1999; Emotion Regulation Questionnaire, Garnefski & Kraaij, 2007; The Center for Epidemiologic Studies Depression Scale, Roberts & Vernon, 1983; and The Daily Physical Symptoms, McCorkle & Young, 1978). Once again, it appears that the participants have reached the fourth component of Hölzel et al.'s (2011) four-component theoretical model, in

which they have experienced a change in perspective of the self, which manifested as increased perceived efficacy in doing their job.

Following their pilot study of this 30-hour intensive program (called CARE for Teachers), the researchers conducted follow-up interviews with the participants that indicated teachers that participated in this program benefitted from fostering a more supportive classroom environment and better classroom organization (Jennings, Brown, Frank, Doyle, Tanler, Rasheed, DeWeese, DeMauro, & Greenberg, 2015). Roeser et al. (2012) reported similar results for teachers participating in mindfulness-based professional development seminars ranging from 2.5 days to 8 weeks in their article surveying the state of mindfulness with teachers' professional development. Their review indicated even the shortest programs resulted in positive changes to the teachers' occupational health, well-being, and capability of forming positive relationships, however, the study itself did not provide quantifiable evidence for this conclusion.

Mindfulness training has been received positively in these studies by counselling staff, teachers, and adults alike; however, the purpose of the current study is to examine how elementary-aged educators use mindfulness with the young children in their classrooms. Therefore, the literature related to mindfulness with youth has also been reviewed.

2.1.3 Mindfulness with youth. Early school curricula focused on presenting case studies of eating disorders to adolescents in high school (O'Dea & Maloney, 2000). The curricula later saw a shift toward exploring societal expectations of females, the media's influence, and the responsibility of each student as an advocate for change (Yager, Diedrichs, Ricciardelli, & Halliwell, 2013). Members of school staff were called upon to exhibit an attitude of body positivity by monitoring their language toward body image and moderating how they approached the topic of nutrition. Relationships between school and community resources were made for talks about body image as a resource for students suffering from poor self-esteem (O'Dea & Maloney, 2000).

Recently, educators are beginning to see that this traditional approach to teaching individuals about body image is not altogether very effective, with some young women even reporting a higher desire for thinness in an Eating Disorder Inventory following the implementation of a program called Project GRAD, which was developed to help educate students about maintaining a positive body image (Zabinski, Calfas, Gehrman, Wilfley, & Sallis, 2001). Yager, Diedrichs, Ricciardelli, and Halliwell (2013) compiled the research that looked at

traditional body image programming in schools. These programs were typically delivered over a very short time period (1 to 2 days of short lessons) and consisted of videos and psychoeducation. They did not find any programs that significantly improved the body image of girls and boys in the long term. Therefore, educators need to be look at different avenues for improving the body esteem in our children and youth.

Kater, Rohwer, and Levine (2007) tackled this question through developing their own school-based curriculum model for promoting a healthier body image, encompassing lessons on accepting what cannot be controlled by teaching children that developmental change is inevitable, emphasizing that negative attitudes can be influenced through promoting healthy nutrition and balanced attention to aspects of their identity outside of their appearance, and developing resiliency by teaching critical thinking regarding media messages that influence body image. Each participant completed a 30-question true-false survey asking about program enjoyment, and changes in their attitudes about their body image, attitude toward dieting, and critical thinking regarding media messages. Short-term results were deemed to be promising for producing change in negative attitudes toward these three topics, however, their study was a pilot for their particular program and the true-false nature of the survey did not gather many nuanced opinions.

As more intervention programs have been introduced to schools since Kater, Rohwer, and Levine's (2007) study, a recent meta-analysis summarized the current state of mindfulness-based interventions in schools (Zenner et al., 2014). The majority of current programs are derived from traditional mindfulness-based stress reduction (MBSR) curricula and follow the same 8-week format with a focus on guided meditation, homework, and education (e.g., Flook et al., 2010). Some studies also involved curricula that did not draw from mindfulness, but rather from principles of positive psychology, which encompasses instruction about thinking that promotes personal development (e.g., Birnie et al., 2010), cognitive-behavioural therapy (CBT), which helps to combat and change maladaptive thinking (e.g., Segal, Teasdale, Williams, & Gemar, 2002) and acceptance and commitment therapy (ACT), in which the emphasis lies on acceptance as a mediator of change (e.g., Shapiro et al., 2007). The median length of programming was set at 8 weeks. They reported that when combined, the studies that used mindfulness had more quantifiable change on cognitive performance, resilience, stress, and coping following the 8 weeks than the other curricula as assessed by MANOVA. However, the results have been mixed

to not significant in the domain of emotional problems, with moderate improvements in emotional concerns in all groups (Zenner, Herrnleben-Kurz, & Walach, 2014).

Recent research on the adoption of mindfulness into the K-12 curricula indicates that both students and teachers reap the benefits (Shapiro, Brown, & Biegel, 2007; Zelazo & Lyons, 2011). Meiklejohn et al. (2012) reported that the teachers administering mindfulness programming in their study demonstrated growth in their resilience capacity, their sense of wellbeing, and sense of self-efficacy alongside similar benefits in their students. An increase in self-efficacy can be categorized by a change in perspective of the self, which is the fourth component of Hölzel et al.'s (2011) four-component theoretical model of mindfulness. When looking at students alone, additional benefits in academic skills, social skills, self-esteem, emotional regulation, and reductions of anxiety and stress were observed, according to their responses on a questionnaire.

A pilot study of a teen mindfulness intervention course called BREATHE investigated the effects of mindfulness training on 28 adolescents aged 10 to 14 (Liehr & Diaz, 2010). BREATHE focuses on six themes: body, thoughts, emotions, attention, loving kindness, and healthy habits. Following intervention, measures of mindfulness, self-compassion, and life satisfaction indicated that there was an improvement across all three domains. Increased self-compassion is a manifestation of a change in perspective of the self, so it is likely that these participants reached the fourth stage of Hölzel et al.'s (2011) four-component theoretical model of mindfulness. However, this study was a pilot project of the authors' own developed program, which may have influenced the motivation to report positive results.

A larger-scale study on the BREATHE program examined the effectiveness of the curriculum for 216 adolescent participants (Metz, Frank, Reibel, Cantrell, Sanders, & Broderick, 2013). The program was met with positive results as participants reported lower levels of perceived stress and psychosomatic complaints alongside improvements in affective regulation and emotional clarity. Moreover, further studies using BREATHE's model of mindfulness programming posited that participation in the curriculum is linked to reduction in risky behaviour, such as impulsive crimes like stealing. They illustrated a mechanism in which engaging in a given situation mindfully results in greater tolerance of positive and negative affect, less reactivity to stress triggers, and overall regulation. This type of emotional regulation is in line with the assertion that mindfulness works through emotional regulation in Hölzel et al.'s (2011) four-component theoretical model. This is also a highly cognitive model and connects

mindfulness with typical CBT techniques by using mindfulness to help draw attention to maladaptive thoughts while reducing reactivity, but using CBT to challenge these thoughts if necessary. In addition to a survey provided by the developers of a program (Liehr & Diaz, 2010), the adolescents reported improvements on a variety of psychometric scales that assessed psychosomatic complaints, perceived stress, acceptability, and social validity (Metz et al., 2013). When Bluth, Roberson and Gaylord (2015) applied the BREATHE program in 6 hour and a half long sessions to a community sample of 28 teens, similar benefits were an increase in self-acceptance, self-compassion, and life satisfaction.

Mindfulness programming potentially has many benefits for elementary students, but as Napoli, Krech, and Holley (2005) pointed out, perhaps the most striking is the attention capacity that the children develop, which is the first stage of Hölzel et al's (2011) four-component theoretical model. Following their 24-week movement and sensation based mindfulness curriculum, their first to third grade participants showed improvements in visual attention, as measured by two computer game tasks, sustained attention, as measured by three computer game tasks, and ADD teacher ratings and test anxiety ratings, as measured by two psychometric scales. Napoli, Krech, & Holley (2005) believed that their program delivered such great improvements that they gave their curriculum the attractive name of *The Attention Academy*, highlighting the importance of mindfulness for the participant cognitively. However, as this is once again a pilot study, the research could not be conducted completely subjectively. However, the multiple modalities of measurement (computer game tasks and standardized questionnaires) added to the credibility of this study.

Semple and colleagues (2010) also provided a cognitive therapy-based mindfulness group intervention to 25 students aged 9 to 13. The curriculum shared similarities to other MBSR curricula, such as a focus on breathing and movement, but added a cognitive twist through drawing, writing, and verbalization exercises. Based on responses to three standardized questionnaires (Child Behavior Checklist, Achenbach & Edelbrock, 1991; State-Trait Anxiety Inventory for Children, Spielberger, 2010; and the Multidimensional Anxiety Scale for Children, March, Parker, Sullivan, & Stallings, 1997) administered at three times (pre-therapy, post-therapy, and at 3-month follow-up), participants reported reductions in anxiety, attention problems, and behaviour problems that were maintained (Semple, Lee, Rosa, & Miller, 2010).

Although the rigor in collecting data multiple times is a strength of this study, this was another pilot study and results should be interpreted with caution.

Coming back to more tried and true methods than all of the pilot programs, Viafora, Mathiesen, and Unsworth (2014) administered an 8-week MBSR course to both students in traditional classrooms and students attending schools serving homeless youth. There was an increase in mindful awareness in both groups, however, the adolescents in the homeless youth program experienced seemingly greater benefits, potentially due to having a greater potential for gain prior to beginning the study. They also reported greater emotional well being and a strong likelihood of using mindfulness to help regulate difficult emotions, such as anger. However, it is important to note that this study is correlational, and while mindfulness programming may have made an impact, it is possible that other mediating factors, such as having a support group in general, could have made an impact.

Following Viafora et al.'s (2014) format to a degree, Black and Fernando (2014) applied a shorter MBSR curriculum to a lower income, ethnically diverse elementary school in California. The program was shorter than the typical 8 weeks at only 5 weeks, however, teacher reports indicated that the effects of the 5-week mindfulness program were noticeable, and that the children's attention, self-control, participation, caring, and respect for others improved (Black & Fernando, 2014). In this 8-week program, it appears that the children participating in the study achieved two of Hölzel et al.'s (2011) four components: attention regulation and emotion regulation. It is unknown whether these effects remained following intervention or were applicable outside of the school situation, however.

Socioeconomic status impacts generalizability of a study much like location and demographics. From a location standpoint, mindfulness initiatives have been carried out by our educators and helping professionals across the world. Forty-eight teenagers in Hong Kong struggling with low academic performance were exposed to a six-week mindfulness-based program (Lau & Hue, 2011). The program included four major activities: stretching to cultivate awareness of body sensations, awareness of sensations in everyday situations, a guided body scan, and a loving-kindness practice of sending love to oneself and others. Measurements of well being, stress, and depressive symptoms were obtained through four standardized scales for mindfulness (Mindful Attention Awareness Scale; Carlson & Brown, 2005), well-being (Scales of Psychological Well-Being; Ryff, 1989), depressive symptoms (Depression Anxiety Stress

Scales; Lovibond & Lovibond, 1995), and perceived stress (Perceived Stress Scale; Cohen, Kamarck, & Mermelstein, 1994). Measurements using these scales were taken before and after treatment and indicated that mindfulness programming may have benefits in reducing depression and increasing overall wellbeing. For two reasons, however, these results should be interpreted with caution: the Mindful Attention Awareness Scale (Carlson & Brown, 2005) is designed for adults, and the researchers adapted it for use with kids, causing the scale to lose some of its psychometric properties. Secondly, it is possible that another variable not related to the actual mindfulness techniques itself (e.g., group membership, meeting friends) is influencing depression and wellbeing levels, so causation cannot be established.

An Amsterdam-based study on a mindfulness-based education program for 208 elementary students in three different schools (aged 8-12) found that the children reported reduction of stress, and improved well-being, as measured by four Dutch psychometric scales assessing for ruminating thoughts, emotion awareness, as in Hölzel et al.'s (2011) four-component theoretical model, a sense of coherence in their lives, and subjective happiness. As well, parents were queried on three rating scales assessing anxiety, emotional disorders, social competence and behaviour (Van de Weijer-Bergsma, Langenberg, Brandsma, Oort & Bögels, 2014). To the study's strength, all of the participants from the beginning remained until the end of the study and the inclusion of three different schools allowed for greater heterogeneity of the sample and generalizability. Most interestingly, however, is that their analysis implied that children who ruminate more (i.e., focus on internal thoughts or worries), as measured by the Non-Productive Thoughts Questionnaire for Children (NPDQ), were affected differently than those that ruminated less. In particular, children that ruminated highly became more aware of their bodily sensations and learned to focus on their emotions less than those students that did not ruminate as much. It could be posited that children that ruminated more simply had more room to make progress than children that already did not ruminate much. However, this study does provide some preliminary support that mindfulness could help to change negative thoughts that children tend to get stuck on, which may be applicable as children begin to tackle their more resilient-to-change body esteem (Luskin-Biordi & McCann-Galon, 2011).

Although mindfulness programming has seen much success in adolescent and elementary initiatives both close to home and around the globe (e.g., Lau & Hue, 2011; Semple et al., 2010; van de Weijer-Bergsma et al., 2014), further studies are still necessary due to some mixed results.

For example, it is not clear whether shorter programs are effective in reaping all of the cognitive and stress-reducing benefits of mindfulness practice. As mentioned, most established programs follow an 8-week format, as in MBSR (Will et al., 2015) or curricula such as the BREATHE program (e.g., Liehr & Diaz, 2010; Metz et al., 2013). Of the programming that has shorter duration (i.e., 5 weeks as in Viafora et al., 2014, and 6 weeks, as in Lau & Hue, 2011), all of the studies have been pilot programs, which lack as wide of a research base as those using the 8-week programs. Huppert and Johnson (2010) attempted a shorter format mindfulness program by administering four 40-minute classes based on MBSR to 155 adolescent boys, much like that in Lay and Hue's (2014) Hong Kong study. While measures of mindfulness (the Cognitive and Affective Mindfulness Scale-Revised), resilience (the Ego-Resiliency Scale), and psychological well-being (Warwick-Edinburgh Mental Well-being Scale) failed to reach significance, it was found that the students that participated in the groups were more likely to continue the practice as rated by a Likert scale. Therefore, this pilot study did not find notable improvements in mindfulness, resilience, and wellbeing after the four sessions, but noted that the adolescents liked it enough to want to continue giving it a try. It cannot be extrapolated, however, that this program would ever cause changes in this particular group of adolescents over a longer period of time.

One of the reasons that mindfulness practice may not seem like it would be effective for children is because mindfulness is a still practice while children are typically anything but. Kilbourne, Scorr-Webber, and Kapitula (2017) allowed children to incorporate movement and play into their classrooms and made observations on their level of activity and class engagement through observations, photos, a student survey, and interviews with the teacher. They found that children that were able to be more active within the class reported higher levels of achievement. Children also tend to retain more information on school tests and assignments when lessons are augmented with concrete, tangible, and visual demonstrations (Chen, Benus, & Yarker, 2016). While there are instances in which children may be able to adapt to traditional programming, Zelazo and Lyons (2011) suggested that tailoring a program to fit the children's needs is essential by utilizing an approach such as listening for a bell to fade and raising their hands when the sound is no longer audible, or by placing a toy or stuffed animal on the belly to help them to monitor breathing. Changing the programming to incorporate movement and concrete visualization should help to make the stillness of mindfulness more engaging for children (Chen et al., 2016; Kilbourne et al., 2017).

Adding a social component to mindfulness may also make participation more attractive, since positive relationships in peers tend to promote more positive well being and motivation (Wentzel & Muenks, 2016). Raes, Griffith, Van der Gucht, and Williams (2014) conducted a highly social mindfulness-training program with 408 students, ranging from age 13 to 20. Although homework was assigned, the vast majority of the 8-week curriculum took place in a group setting with much discussion of shared and personal experiences. Using the Depression Anxiety Stress Scales (Lovibond & Lovibond, 1995) as a measure, those students that engaged in the program rated themselves lower on both depression and anxiety. Importantly, however, the correlational nature of the study does not allow the reader to make a conclusion as to whether the mindfulness programming was the mediator of change, whether it was the social group participation, a combination of both, or something else entirely.

Another way programming could be modified is to capitalize on the popularity of movement and yoga-based programming (Serwacki & Cook-Cottone, 2012). Many schools are now starting to embrace regular yoga practices, including schools within Saskatchewan. Gould, Dariotis, Mendelson, and Greenberg (2012) administered a 12-week yoga-inspired mindfulness program, which included postures and movement sequences, mindful breathing, and a focus on positive thoughts. Relative to the control group of 46 students, the 51 students in the intervention condition showed a reduction in depressive symptoms and stress response, as assessed by the Short Mood and Feelings Questionnaire – Child Version, the Emotion Profile Inventory, and the Responses to Stress Questionnaire. They also found gender and grade did not moderate the effectiveness of the program, which indicates that mindfulness may be appropriate equally at all age and gender levels, and the urban school sample that the study drew from was heterogeneous, adding to generalizability of results.

Results have been mixed in the sparse amount of studies on yoga the programming for young students (e.g., Beets & Mitchell, 2010; Mendelson et al., 2010; Serwacki & Cook-Cottone, 2012). While high school students provided self-reports that indicated reduction of stress and improved wellbeing after only two weeks of yoga, an 8-week program for fourth-and fifth-graders did not produce such strong results (Beets & Mitchell, 2010; White, in press). However, a more recent and comprehensive program consisting of yoga postures, guided meditation, and a focus on breathing has shown improvements in reducing stress and emotional arousal in children in the same age group as measured by psychometric scales examining depressive symptoms,

positive and negative emotions, and stress response (Mendelson et al., 2010). Another comprehensive mindfulness program was interwoven three times daily into the lesson plans of participating teachers. The intervention focused on attention training and a focus on mindful breathing. Particular improvements in self-concept were found in the more so in the younger students (aged 8 to 10) than in the older students (aged 11 to 12), as assessed by the Self-Description Questionnaire (Schonert-Reichl & Lawlor, 2010). Other concepts, including positive and negative emotions and optimism, were measured by the Positive and Negative Affect Scale (PANAS; Watson & Clark, 1999) and the Optimism subscale of the Resiliency Inventory (Baruth & Carroll, 2002), but the differences in these constructs between the two groups were not as pronounced. This Canadian study has particular relevance to the current study due to its geographic proximity and the attention to younger children (aged 8 to 10), and it suggests that participation in mindfulness programming at this young age is correlated to gains in self-concept.

Yoga is a popular practice within our society and has occasionally found its way into our school systems (e.g., Serwacki & Cook-Cottone, 2012). However, it is possible to use other movement-based types of mindfulness if yoga is not desirable within a certain school or culture based on its non-secular roots in Buddhism, of which many individuals do not practice (Brown, 2015). Tai Chi, as an example, has been shown to boast similar benefits to yoga in improving sense of wellbeing, calmness, relaxation, sleep, and self-awareness in adolescent children (Wall, 2005). Nonetheless, a meta-analysis by Greenberg and Harris (2011) claimed educators are quite enthusiastic about using mindfulness practices within their classrooms particularly that of yoga and meditation because of the benefits in terms of increase in focus and stress reduction in their children. While they report that mindfulness has been associated with improved attention in children with ADHD, improved academic performance, anxiety, and stress levels, they report that many of the studies contributing to this research have flaws in their design. For example, Flook et al.'s (2010) study indicated that teacher participants were aware of the conditions that each child was placed in (i.e., control group or intervention group), which may have impacted their reports. Other studies have small sample sizes that may temper the conclusion of the results and detract from generalizability (e.g., Broderick & Metz, 2009; Mendelson et al., 2010). Therefore, more research is necessary to develop stronger conclusions about the use of non-yogic mindfulness practices with children.

One of the studies critiqued by Greenberg and Harris (2011) was Flook et al.'s. (2010) study. Flook et al. (2010) focused on mindfulness interventions using breathing and movement exercises, similar to yoga, with elementary students between Grades 2 and 3. Reports by teachers indicated improvements in the executive functioning abilities of these students (including attention and cognition). However, the teachers were aware of the conditions that each child was placed in, so the reports were not truly objective, which may detract from the credibility of the study (Greenberg & Harris, 2011). Therefore, further research among this age group is necessary to draw stronger and more valid conclusions.

The use of mindfulness practices in prevention of eating disorders in students with poor body esteem has been quite understudied (Atkinson & Wade, 2015; Broderick & Metz, 2009; Safer, Couturier, & Lock, 2007). Therefore, the majority of the literature informing this research comes from understanding how mindfulness is used in treatment of other concerns, such as stress, anxiety, anger, and depression in both youth and adults (e.g., Bluth, Roberson, & Gaylord, 2015; Liehr & Diaz, 2010; Rohwer & Levine, 2007; Zenner, Herrnleben-Kurz, & Walach, 2014). Mindfulness practice has utility for adolescents (e.g., Atkinson & Wade, 2015; Raes, Griffith, Van der Gucht, & Williams, 2014), and is flexible enough to be tailored for use in elementary students and those students with body image concerns (e.g., Zelazo & Lyons, 2011). Tailoring mindfulness programs to those students in the latter category may be essential, as both recent and decade-old literature points to a growing problem with body image concerns in young children and mindfulness is a potential avenue to help curb these negative attitudes toward one's body at an early age (Brixval et al., 2011; Hayes & Tantleff-Dunn, 2010; Ling, McManus, Knowles, Masters & Polman, 2015; Richards, Caldwell & Go, 2015).

2.2 Body Image Concerns

Children are being plagued by social media messages at an earlier age than ever before in history (Tiggemann & Slater, 2013). The negative effects, such as increased body surveillance and lower self-esteem, are beginning to show in children as young as 7 to 9 years of age in the forms of increased desire for thinness, monitoring of diet, and expressing a concept of an idealized body (Tiggemann & Slater, 2013). As the body esteem, or the value placement of one's body based on appearance or ability (Franzoi & Shields, 1984; Tucker, 1981), of our adolescents continues to plummet, anorexia nervosa and bulimia nervosa are already manifesting within

approximately 0.3% of our young girls and 0.2% of our young boys (Ackard, Fulkerson, & Neumark-Sztainer, 2007).

There have been growing concerns about body image esteem through the past decade (Dohnt & Tiggemann, 2006; Hayes & Tantleff-Dunn, 2010; Lawrie, Sullivan, Davies, & Hill, 2007). As defined in Chapter 1, body image is the objective conceptualization of one's body. While this conceptualization tends to be relatively stable, it can be changed and does change across contexts and time (Luskin-Biordi & McCann-Galon, 2011). Since body image can be changed, children will continue to need resources to help improve their body image in the present days and years to come (Brixval et al., 2011; Heron, et al., 2013). Mindfulness, when implemented early, may be a resource to curb negative body esteem earlier than adolescence through promoting self-acceptance and reducing anxiety (Broderick & Metz, 2009; Safer, Couturier, & Lock, 2007). However, it appears that young children in elementary school are already experiencing negative attitudes toward their bodies, and mindfulness may be used not necessarily as a prevention tool in elementary body image concerns, but in reaction to their onset (e.g., Hayes and Tantleff-Dunn, 2010), Richards, Caldwell, & Go, 2015).

2.2.1 Body esteem in youth. Although body image concerns are exploding in children in this modern day, it appears that the issue has been mounting for well past a decade. Girls aged as young as 5 to 8 were already expressing a desire for dieting, thinness, and experiencing low self-esteem as a result of images in magazines and music television shows ten years ago, with boys showing similar patterns of dissatisfaction by age 9 to 14 (Dohnt & Tiggemann, 2006; Lawrie, Sullivan, Davies, & Hill, 2007).

Another early study looked at predictors of later eating disorder development by examining the body esteem of 100 girls in grade 3 to 5 alongside their mothers. Unfortunately, they found that some students this young did have some issues with self-esteem in relation to their body image. Specific predictors that they noted to increase the risk of low self-esteem included teasing, peer focus on weight and shape concerns, mother's influence on daughter's weight, comparison to others, and a higher body mass index (Vander Wal & Thelen, 2000).

In 2001, Hendy, Gustitus, and Leitzel-Schwalm looked at predictive factors for body dissatisfaction in preschool aged children through the lens of Bandura's Social Cognitive Theory. They assessed the children using a typical method of identifying body image dissatisfaction in youngsters called Collins' child figure drawings, in which the child chooses one silhouette that

matches their *ideal figure* and one that matches their *perceived current figure*. The discrepancy between the two is then calculated for a dissatisfaction score. Using this tool, they found that factors suggested by Bandura, such as *role models of fitness* like parents, verbal messages (particularly from mothers and peers), and experience of competence related to body image were all linked in varying degrees to the child's subsequent body image. The factor that seemed to hold the most weight, however, was verbal messages of physical appearance from the mother, be it of the child or the mother herself. These four studies all indicated the presence of a concern with body image in young children, identifying common factors correlated to the development of a negative body image, such as hearing negative messages from a close role model and a discrepancy between their idealized body and their true body. However, these studies are all at least a decade old and the factors that may have previously impacted body image in young children may have evolved.

Similar to Hendy et al. (2001), Gaspar, Amaral, Oliveira, and Borges (2011) used Collins' child figure drawings to examine whether physical exercise acted as a protective factor against body dissatisfaction in children aged 10 to 17. They found that those boys and girls that engaged in high levels of physical activity did tend to report less discrepancy in their ideal figures and true figures, and therefore, it is posited that physical activity influences a child's conceptualization of their bodies, or their body image. Yoga is a common mindfulness practice that utilizes physical activity, and studies such as Gaspar et al.'s (2011) provide one potential mechanism for mindfulness to provide positive effects on body image. However, their study did not examine yoga in particular, leaving a gap between this study and the link to mindfulness.

The advent of social media has been blamed for perpetuating negative messages about body image, with airbrushing in the media contributing to unrealistic body ideals and social media posts influencing women and girls' moods (Paraskeva, Lewis-Smieth, & Diedrichs, 2017; Tiggemann, 2014). Phenomena such as cyberbullying, a form of attacking an individual through harmful verbal or picture messages, and *Facebook Depression*, a phenomena linked to perceived inadequacy based on having too few 'friends,' 'likes,' or positive messages online, are being linked to lower self-esteem and body image (Blease, 2015; Jelenchick, Eickhoff, & Moreno, 2013; Tandoc, Ferrucci, & Duffy, 2015).

Richards, Caldwell, and Go (2015) conducted a meta-analysis looking at the health impact of social media on children and young people. They postulated that while there is growing

evidence for the link between social media and body dissatisfaction, there is still a severe lack in the literature on the body image of children today with these new inventions seeing as few of their identified studies actually examined the impact on younger children. All of the included studies were correlational, which although likely necessary, does not provide an avenue to determine a cause and effect relationship. Therefore, there is a notable lack of research examining the true impact of social media on younger children.

Not all studies indicated that media exposure always has crushing effects on girls' self-esteem. In a study alarmingly entitled *Am I too fat to be a princess*, researchers investigated brief exposures to appearance-related movies (e.g., Disney princesses) and the resultant body esteem voiced by girls aged 3 to 6 (Hayes & Tantleff-Dunn, 2010). A strength of this study was the variety of direct and indirect methods to assess girls' self-esteem, of which included a child questionnaire, researcher observations and rating scales, computer software to allow children to create a character that best represents themselves, and assessing the number of times each child engaged in play relating to their vanity. The results of these measures indicated that the brief exposure to the Disney clip had little to no effect on how the children perceived their own bodies. The study, however, consisted of 10 children from a relatively homogenous sample, which is not representative of the vast majority of children with differences in weight, shape, size, and race,

Despite studies such as Hayes and Tantleff-Dunn's (2010), there is no denying that young children are still starting to feel the impact of a growing focus on body ideals. Heron et al. (2013) showed 58 elementary-age children a set of silhouette drawings and noted discrepancies between what the child selected to represent their current body size and ideal body size. They noticed that the discrepancies become more pronounced in Grades 1 and 2, regardless of race or gender. The results of this study suggest that interventions to promote a healthier and more realistic ideal body image, perhaps through the use of mindfulness, should be targeted toward children at this grade level.

The ideal to be thin is felt by students across the globe. A study of Danish school children aged 11 to 15 found that both lower body image esteem and higher body weight were related to bullying (Brixval, Rayce, Rasmussen, Holstein, & Due, 2011). However, the study was a post-hoc analysis of information taken from a broad data set – the Danish contribution to the School-aged Health Survey (Currie, Elton, Todd, & Platt, 1997). Therefore, there were very few questions actually dedicated to asking about body image and there was no true definition offered

to the word “bullying”. More research would be necessary in this area to determine the severity of body image concerns of young adolescents around the world.

Interestingly, it appears body image dissatisfaction has more to do with the child’s perception of their body image than their physical weight status (Ling, McManus, Knowles, Masters, & Polman, 2015). These researchers examined emotional rehearsal, weight status, and self-perception of body image in children ranging from Grade 4 to 6 (8 to 12 years old). They found children this young tended to be more dissatisfied with their body the higher their body mass index (BMI) was. However, they found that children with increasingly greater BMIs had a tendency to emotionally rehearse, or dwell, less on their weight. This may act as a protective factor that may help them to remain satisfied with their body despite their physical overweight if these children truly are not ruminating, or spending much cognitive thought, on their body weight. This is an area where mindfulness may be able to help shift some of the cognitions surrounding body image since the cognitions may not be strongly set into place.

Following this notion, Shriver et al. (2013) embarked on a large-scale quantitative study looking at the relationship between the body esteem and satisfaction of 214 third grade students (aged 7 to 8) and their weight, gender, and physical activity. Similar to Brixval et al. (2011), they found the most important indicators of poor body self-esteem were not the child’s actual level of physical activity, but rather their attitudes of their weight and appearance. However, the data was taken from a large questionnaire where body image was one of many research questions, and it is likely not enough information was given to provide a strong conclusion. This study lends some support to how the state of a child’s cognitions is strongly linked to their level of self-esteem, which is applicable as the current study posits that mindfulness could produce more positive self-esteem through changing the cognitions of the children that are practicing.

As the present study is focused on mindfulness in improving the outcomes for children with poor body esteem, looking at how mindfulness is currently impacting children with poor body esteem informed the present study particularly on if mindfulness has been successful in changing the negative cognitions of the children practicing. However, as with mindfulness studies in general, most research using mindfulness in adults with a negative body image has been conducted with adults (e.g., Cramer et al., 2016; Proulx, 2006). These studies have informed the current literature examining mindfulness practice specifically with youth experiencing body image concerns.

2.2.2 Positive body image research. While much of the focus in the literature refers to how body image is influenced negatively, it is important to view alternatives as to how body image can rather be influenced in a more positive manner. In a literature review examining future directions for positive body image research, Halliwell (2015) discussed the research into positive body image that has been done over the past decade. Her conceptualization of body image is that positive body image and negative body image are theoretically two separate constructs. Positive body image “involved accepting and appreciating the body as it is”, even though there still “may be aspects of appearance that an individual would like to change” (Halliwell, 2015, p. 178). Therefore, while there are typically moderate to large correlations between the two, they still have unique relationships with other variables (Halliwell, 2015).

Four theoretical models of positive body image development have been proposed in the literature of the past ten years, of which include the acceptance model of intuitive eating (Avalos & Tylka, 2006), the embodiment model (Mentzel & Levine, 2011), caregiver messages and attachment (Frisen & Holmqvist, 2010), and a body image flexibility mindset (Sandoz, Wilson, Merwin, & Kellum, 2013). Of these four models, the embodiment model and the body image flexibility mindset have the most applicability to the current study.

The embodiment model by Mendel and Levine (2011), and inspired by the work of Tylka and Piran (2001, 2002), proposes that participation in “embodying” activities leads to a sense of “embodiment” and positive body image. Embodiment particularly “refers to the sense of ownership of the body and experiencing it as trustworthy and deserving of respect” and is a “key means of expressing competence, interpersonal relatedness, self-expression, and power” (Tiggemann, Coutts, & Clark, 2014, p. 199). Mentzel & Levine (2011) propose more specifically that activities that are situated in the body (physical) and that are culturally grounded are particularly embodying experiences, with athletics and sports mentioned as a specific example.

In their research, Tiggemann, Coutts, & Clark (2014) assessed Positive Body Image (Body Appreciation Scale; Avalos, Tylka, & Wood-Barcalow, 2005), body dissatisfaction (Body Areas Satisfaction Subscale of the Multidimensional Body-Self Relations Questionnaire; Brown, Cash, & Mikulka, 1990), self-objectification (Surveillance Subscale of the Objectified Body Consciousness Scale; McKinley & Hyde, 1996), and enjoyment of sexualisation (Enjoyment of Sexualization Scale; Liss, Erchull, & Ramsey, 2011) in 112 belly dancers and 101 individuals who had never participated in belly dancing. They found that belly dancing qualified as an

embodying activity, in that individuals participating in belly dancing had higher levels of positive body image and lower levels of self-objectification and body dissatisfaction (Tiggemann et al., 2014).

Mahlo and Tiggemann (2016) continued searching for activities that complimented the Embodiment Model of Positive Body Image and focused specifically on yoga's role in developing positive body image. In a similar manner to Tiggemann, Coutts, & Clark's (2014) study on belly dancing, 193 yoga practitioners (Iyengar and Bikram types) and 127 non-practitioners completed questionnaires to assess positive body image, embodiment, self-objectification, and desire for thinness (Body Appreciation Scale, Tylka & Wood-Barcalow, 2015; Physical Body Experiences Questionnaire, Mentzel, 2000; Surveillance subscale of the Objectified Body Consciousness Scale; McKinley & Hyde, 1996; Photographic Figure Rating Scale, Swami, Salem, Furnham, & Tovée, 2008; Swami et al., 2012). Overall, they found that yoga participation was correlated to positive body image. Moreover, embodiment and reduced self-objectification mediated this relationship. Haliwell (2015) moreover commented on activities that are not related to sports and athletics, but rather promote positive body image through an appreciation of what the body can do (capability) and the mind-body connection. In particular, she noted that studies have found music performance and acting to be connected to a flow experience, which is fulfilling for the individual and is linked to an increase in self-esteem (Martin & Cutler, 2002; Wrigley & Emmerson, 2011).

The body image flexibility mindset was proposed by Sandoz, Wilson, Merwin, Kate, and Kellum (2013) when they created the Body Image-Acceptance and Action Questionnaire to assess for the construct. The rationale behind body image flexibility as a mediator for the development of positive body image is because they believed body dissatisfaction to be such a pervasive set of thoughts and if the individual does not allow these thoughts to have an impact on health and well being, they could develop a more positive sense of the self (Sandoz et al., 2013). To illustrate, they described body image inflexibility as the level in which it is impacting the life of the individual (e.g., "When I start thinking about the size and shape of my body, it's hard to do anything else", Sandoz et al., 2013, p. 40).

Wendell, Masuda, and Le (2012) examined the role of body image flexibility in the relationship between disordered thoughts about eating and disordered eating symptoms in 208 college students that were not diagnosed with an eating disorder. Each participant complete an

assessment package assessing Disordered Eating Cognitions (Mizes Anorectic Cognitions Questionnaire – Revised; Mizes et al., 2000), Body Image Flexibility (The Body Image-Acceptance and Action Questionnaire, Sandoz et al., 2013), and overall disordered eating pathology (the Eating Disorder Examination-Questionnaire; Fairburn, 2008). They found that body image flexibility was a mediator of the relationship between cognitions and symptoms, which is in line with Sandoz et al.'s (2013) theory.

The research into positive body image is still emerging and is relatively new (Haliwell, 2015). However, it is possible that mindfulness can help to influence the children's positive body image conceptualizations through influencing their thoughts, as is suggested by Hölzel et al.'s (2011) model in which there is a change in perspective of the self (Sandoz et al., 2013). As well, participating in embodying activities, such as yoga, can help to reduce the level of self-objectification of the children participating and can overall mediate a relationship between the activity and a positive body image.

2.2.3 Mindfulness in adults with negative body image. A large portion of the research informing how mindfulness might impact an individual's body image results from studies of participants with clinical diagnoses of an eating disorder. One of the earliest studies was carried out by Proulx (2006), who reported on the experiences of six women struggling with bulimia nervosa after they participated in an eight-week mindfulness-based eating disorder treatment group. The group focused on training using guided meditation, CDs for at-home practice, journaling, and general support. Data analysis was qualitative and was gathered from two different sources: self-portraits drawn before and after the mindfulness group and from excerpts from the journals throughout the process. Despite the small sample size, the data that the women provided was rich, descriptive, and highly creative. Following treatment, the women exhibited striking differences in artistic self-portraits, displaying a more connected, whole sense of self than the disembodied, self-critical pre-treatment self-portraits. Moreover, the women reported lower levels of stress and better methods of coping with stress following the program.

Proulx's (2006) study was structured and curriculum-based, so while it supports the use of formal programming and mindfulness-based curricula, it does not address more informal practices. While formal curricula are popular within schools, much programming is still informal. Yoga is perhaps the most prevalent form of mindfulness practice within our current society, with 13.2% of Americans reporting use at least once in their lifetime, according to a wide-range

National Health Interview Survey, reaching 34, 525 individuals (Cramer, Ward, Steel, Lauche, Dobos, & Yhang, 2016). Boudette (2006), a yoga instructor, captured the experiences of women with disordered eating and body image disturbances in a gentle yoga class using narrative to tell these their stories. The gentle movement and postures of yoga eased their anxiety, increased their outward confidence as illustrated by a change in dress, and facilitated a change from perceiving the body as what it looks like to appreciating its sensations and abilities as they developed strength from practicing the yoga postures.

Eating disorders encompass both food restriction, like anorexia nervosa and bulimia nervosa (Boudette, 2008; Proulx, 2006), and excessive intake like that in binge eating disorder (BED). Mindfulness practice has shown promise in treating adults with BED (Kristeller & Wolever, 2010). Following a focus group-style guided mindfulness intervention program, participants with BED were able to develop higher awareness of bodily cues of hunger and satiety, to better control their emotional states, and had greater self-acceptance.

Reviewing many of the current studies on mindfulness practice in eating disorders, Wanden-Berghe, Sanz-Valero, and Wanden-Berghe (2010) found support for various types of mindfulness practice, including psychoeducation explaining the history and ancient practices of meditation, group practice, and guided meditation. Group practice of mindfulness-based stress reduction programming and guided meditation particularly helped with stress reduction, with participants reporting that they felt calmer, more focused, and better able to regulate their emotions in interviews following the practice (Broderick & Metz, 2009; Ortnier, Kilner, & Zelazo, 2007). Moreover, they found that mindfulness helped to reduce negative body talk and thoughts with all of the three aforementioned types of eating disorders. However, much like Burke et al. (2010) and Black et al. (2008) who also conducted meta-analyses, they mentioned their study had limitations such as small sample sizes and a small number of recruited studies overall. They underlined the importance of further research in this area, a gap in which this proposed study will help to fill by addressing the current state of mindfulness in schools and the resultant impact on body image in elementary students in Saskatchewan.

2.2.4 Mindfulness in children with negative body image. Although there are relatively few studies focusing on mindfulness-based therapies for the prevention of eating disorders, results of this limited data set have been generally positive. For example, Safer, Couturier, and Lock (2007) modified dialectical behaviour therapy (DBT), a cognitive approach, by placing it

under a mindfulness lens. From this standpoint, DBT conceptualized binge eating as behaviours with the purpose of influencing, changing, or controlling challenging or painful emotional states.

The researchers believed mindfulness to be complimentary to traditional cognitive-behavioural approaches (Safer, Couturier, & Lock, 2007). The adolescents participating in their study were taught to focus on the present moment, particularly when engaging mindfully when eating their meals. The marriage of traditional cognitive behavioural and mindfulness techniques appeared to be successful in alleviating symptoms of binge eating disorder and improving self-concept (Safer et al., 2007). This supports the notion that mindfulness can work hand-in-hand with programming purposively intended to change in individual's cognitions to start thinking more positively, and this study suggests that it could work particularly with children experiencing difficulties surrounding their body image.

Mindfulness-based stress reduction (MBSR) is an 8-week program designed to teach participants the principles of mindfulness practice through the use of yoga, homework, body scanning, meditation, and breathing exercises (Will, Rancea, Monsef, Wöckel, Engert, & Skoetz, 2015). Atkinson and Wade (2015) applied this program on a large scale to 347 typically-developing adolescents. Each child was assigned to a mindfulness-based intervention (MBI) group, a dissonance-based intervention group, or a traditional education group as a way of examining the impact of each intervention in eating disorder prevention. MBI consisted of many tasks focused on helping keep the individuals appreciative of their bodies in the moment, such as a visualized mirror reflection exercise in which positive self-statements are taught and encouraged. Tips on how to become better at mindfulness and how to reduce distractions were also taught.

Each student was given seven standardized questionnaires to assess their weight and shape concern (the Eating Disorder Examination – Questionnaire, or EDE-Q; Hilbert, Tuschen-Caffier, Karawautz, Niederhofer, & Muncsh, 2007), negative affect (Positive and Negative Affect Schedule – Expanded; Watson & Clark, 1999), dietary restraint (Dutch Eating Behaviour Questionnaire – Restraint; Van Strien, Frijters, Bergers, & Defares, 1986), thin-ideal internalization and socio-cultural pressures (Sociocultural Attitudes Towards Appearance Scale; Thompson, van den Berg, Roehrig, Guarda, & Heinberg, 2004), eating disorder symptoms (EDE-Q), psychosocial impairment (Clinical Impairment Assessment; Bohn & Fairburn, 2008), and intervention validity (Child and Adolescent Mindfulness Measure; Greco, Baer, & Smith, 2011).

Each student was also asked to rate the program they were assigned to on a 5-point scale based on feelings of improvement in body image, enjoyment, and other influencing factors. Based on this wide base of information, the groups were compared via ANOVA on all of these concepts. They found that individuals in both the MBI and DBI groups experienced comparable reductions in weight and shape concern, dietary restraint, and other markers of eating disorder development. Therefore, mindfulness is being looked at as a viable alternative to some of the more popular preventive interventions for adolescents.

However promising this study may appear, it is only one study and there remains a lack of research in the area of mindfulness with children with negative body image that have not yet developed an eating disorder or other adverse concern. Two recent meta-analyses of the state of research into meditative practices indicated that there is a lack of research in this area, particularly of research with adequate sample sizes and strong evidence for the practice (Black et al., 2008; Burke, 2010). In particular, Black et al. (2008) reviewed 16 studies with children using mindfulness, however, only 4 of these studies examined children from the ages of 7 to 9. These studies often contained much smaller sample sizes than are available in studies with adults and not much ethnic diversity. Burke et al. (2010) reviewed 15 studies, much the same as in Black et al.'s (2008) meta-analysis, and came to the same conclusion that out of the three studies that actually examined children using mindfulness in any capacity, the sample sizes were much smaller and much of the data and methods were not reported adequately to make strong conclusions.

The lack of current research in mindfulness with elementary students is important as the Saskatchewan curriculum is beginning to find a place for mindfulness within the health programming for children as young as 7 to 9 years of age. At this stage, the focus is typically on reducing self-judgment and encouraging acceptance of oneself, which sets a base for research to be conducted on the usefulness of these programs in improving body image schemas in elementary children (Saskatchewan Ministry of Education, 2010a). However, most research on mindfulness in an elementary context has focused on stress reduction, anxiety reduction, and teacher and parent reports claiming improvements in students' well-being and executive functioning (e.g., reasoning, task-flexibility, planning ability) in the classroom (Meiklejohn et al., 2012; Roeser, Skinner, Beers & Jennings, 2012) with many studies being inadequate to draw strong conclusions from (Black et al., 2008; Burke et al., 2010). A stronger research base is

necessary to assess the utility of mindfulness within the classroom as it is becoming used on a wider scale. As a starting point, there has been more investigation of mindfulness interventions with a focus on body image in adults, which will inform investigation of the use of mindfulness with children, as in the current study.

2.3 Summary

The mounting concerns regarding negative self-image in adolescents and elementary students have been greatly understudied despite evidence that children as early as age 7 are impacted (Tiggemann & Slater, 2013). Moreover, children as young as age 5 have expressed a desire for thinness, which has been driven by media and society displaying thinness as desirable (Dohnt & Tiggemann, 2006). However, most school-based initiatives have focused on adolescents and teenagers facing two main issues. First, the growing prevalence of adolescents with eating disorders suggests that programs targeting adolescents may be too late to be preventative, with approximately 2.8% of adolescents aged 13-18 in the United States being diagnosed with an eating disorder including anorexia nervosa, bulimia nervosa, or binge eating disorder (Swanson, Crow, Le Grange, Swendsen, & Merikangas, 2011). Second, the education-based programs unfortunately seem to fall flat, with most traditional psychoeducational and video-based programs being too short (1-2 days, on average) and failing to connect with the adolescents that the programming is being provided for (Yager, 2013).

Mindfulness programming is a potential avenue to alleviate anxiety and depression through helping young children to send the messages of loving kindness taught through mindfulness to change the harmful negative messages within their cognitions (Bluth, Roberson, & Gaylord, 2015; Liehr & Diaz, 2010; Metz, Frank, Reibel, Cantrell, Sanders, & Broderick, 2013). However, it has not been widely studied in addressing body image concerns in elementary students, with most mindfulness programming studied being geared toward adults with eating disorders (e.g., Proulx, 2006). For this reason, the present study aimed to examine teachers' perceptions of how the mindfulness practices that they use within their classrooms impacts the body image of their elementary-aged students. Hölzel et al.'s (2011) Four-Component Theoretical Model informed the results of this study as a theoretical framework in which mindfulness may impart change in the elementary students and their educators alike. These results may stimulate further initiatives to build on this programming, to set it in place at younger ages, and to help our children feel better about themselves and their bodies.

Chapter 3: Methodology

3.1 Rationale for Qualitative Methodology

The present study explored the experiences of elementary teachers' using mindfulness within their classrooms, and their thoughts on how mindfulness might produce a change in children's body image using a basic qualitative research design. In qualitative studies, the researcher is considered a human instrument of data collection (Charmaz, Denzin & Lincoln, 2003). The researcher must suspend their pre-existing worldview in order to learn the worldview of others and become a co-investigator with the participants (Ponterotto, 2002). The researcher must also seek to understand, interpret, and finding meaning within the complex story to build a picture using different theories and perspectives (Rogers, 2000).

Qualitative analyses provide a deeper understanding of the research problem than can necessarily be drawn from quantitative studies (Creswell, 2007) through "inductively building rather than testing concepts, hypotheses, and theories" (Merriam, 2009, p. 66). Therefore, qualitative research can build upon the frameworks by examining the issues in detail and depth. Hölzel et al.'s (2011) Four-Component Theoretical Model was used as theoretical mechanism in this study to better understand how mindfulness can impart a change in the attitudes of children and teachers related to children's body image. Qualitative research is "not restricted to specific questions and can be guided/redirected by the researcher in real time" (Anderson, 2010, p. 3), which allows the experiences of each participant to unfold as they are "without destroying complexity and context" that often occurs in quantitative research (Atieno, 2009, p. 4).

3.2 Thematic Analysis

A thematic analysis approach was chosen to support the study's purpose of exploring the experiences and opinions of elementary teachers using mindfulness in terms of affecting body image in *rich detail* (Merriam, 1998). Thematic analysis is a "method for identifying, analyzing, and reporting patterns (themes) within data" (Braun & Clark, 2006, p. 79). Specifically, the research is focused on understanding how the participants make meaning of a given situation. This meaning is filtered through the researcher's analysis as an instrument. The analysis is inductive, and the outcome is richly descriptive (Merriam, 2000).

Qualitative research encompasses a variety of approaches to choose to fit the research questions and goals (Merriam, 2002). One of the advantages that made thematic analysis

attractive for framing the analysis of this study is that it is theoretically flexible. It suits an exploratory study by allowing researchers to organize and explain their data without having to “subscribe to the implicit theoretical commitments” of such types of research as grounded theory or interpretive phenomenological analysis (Braun & Clarke, 2006, p. 8). For this reason, grounded theory was inappropriate for the current study as the resultant data was not used to inform a substantive theory, but was rather used to explore a new concept (Merriam, 2000). Similarly, phenomenology was not chosen for the current study because “phenomenologists are interested in showing how complex meanings are built out of simple units of direct experience” (Merriam, 2000, p. 7). The research questions of the present study were too focused for the general analysis of identifying the *essence* of the overall phenomenon of using yoga with children (Merriam, 2000). Phenomenology is also too focused on the attribution of the participants’ personal meaning that they provide to the phenomenon, however, the study’s purpose was to look at the participants’ insight into the experiences of the children that they teach as well (Patton, 2002).

Thematic analysis moves past simply placing the words and quotations from the participants into categories, and rather is a strategy to help uncover the implicit and explicit ideas within the data (Guest & MacQueen, 2012). Specifically for this study, thematic analysis was advantageous as it provided a mechanism for exploring the ideas of the participants as they relate to a relatively understudied area: mindfulness with elementary students in terms of body esteem. , The following research questions were explored through the thematic analysis methodology:

1. What are the experiences of teachers administering mindfulness practices to elementary-aged children? and
2. What qualities of mindfulness do teachers believe are helping children to improve their self-esteem and body image?

3.3 Theoretical Framework

A theoretical framework consists of concepts and existing theory that informs data analyses by connecting the research to existing knowledge and provides an explicit statement of the theoretical stance of the analysis for the reader to critically evaluate (Asher, 1984). Hölzel et al.’s (2011) Four-Component Theoretical Model of mindfulness (i.e., attention regulation, body awareness, emotion regulation, and change in perspective on the self) was used to provide a mechanism for which change can occur in regards to children’s body image, their attention, and

their overall self-concept. This model, informed by previously written and described models related to the potential mechanisms of mindfulness (e.g., Grabovac et al., 2011; Kerr et al., 2013; Lutz et al., 2008; Olendzki, 2010), allowed for the most complete picture of the current theoretical knowledge of why mindfulness produces change. Each of the four factors of the model are relevant to the research questions and provided a framework with which to organize the themes generated through data analysis.

3.4 Participant Recruitment and Selection

The University of Saskatchewan's Behavioural Sciences Research Ethics Board granted ethical approval for this study (Beh #17-71). Once ethical approval was received, permission to advertise the study was sought from two urban Saskatchewan school divisions in order to recruit educators who were: (1) elementary school teachers (grades 2 to 5) within the Saskatchewan region; (2) including formal and/or informal mindfulness practices within their classrooms for at least eight weeks, and; (3) willing to provide approximately 1 to 3 hours of their time to participate in an interview and follow-up session. The deadline for submitting the request to advertise the study to one school division before the end of the school year was missed. However, permission was granted by the second school divisions to advertise the study via placement of the study's recruitment poster on the school division's web portal. Hard copies of the recruitment poster were also posted within specific schools in the same division whose principals were willing to advertise the study.

Elementary school teachers (grades 2 to 5) across Saskatchewan were also invited to take part in this study through an advertisement placed in the Saskatchewan Teacher's Federation bulletin and posters that were placed in local mindfulness-based studios. Lastly, participation was invited through snowball sampling, where participants were asked to invite other participants they knew of that fit the criteria for the study. Any known potential participants brought to my attention by word of mouth were also contacted with their permission.

Purposeful sampling was used to select elementary (Grade 2 to 5) teachers using mindfulness practices in their classrooms among the prospective participants that responded to the call for participants. Participant recruitment continued until data saturation, or the end point at which additional interviews did not result in identification of new concepts (Sargeant, 2012), occurred. Ten participants responded to the call to participate, however only eight of these participants met the inclusionary criteria for participation.

3.5 Data Generation

Basic qualitative research may be conducted with multiple methods of data collection, such as field participation, observations, and case studies, or interviews (Huppert & Johnson, 2010). Two interview sessions were conducted with each of the eight participants and digitally recorded to ensure information is not missed, an initial personal interview and a follow-up interview. The initial personal interviews lasted approximately 1 to 1 ½ hours, with the date, time, and setting being mutually agreed upon by both the student researcher and the participant. Participants chose to either meet in their own classrooms after school or in a publically accessible meeting room located on the University of Saskatchewan campus to allow for privacy. Individual semi-structured interviews that allowed for elaboration and follow up questions (Fylan, 2005; Johnson, 2010) were used in order to better understand the experiences of teachers using mindfulness in their classrooms, and how they perceived the impact mindfulness interventions have had on their students' body esteem. Open-ended questions were posed to assist in understanding the participants' perspectives (Smith & Osborn, 2003) and allow for a more complete picture of the educators' experiences. Each initial interview followed the same format. First, the student researcher and participant had a discussion about the study's purpose, concerns in relation to confidentiality and potential distress, and who to contact in case of further questions or distress. The benefits of participation were also mentioned to be the contribution to research and being able to learn more about the mindfulness practices that each participant uses in their classrooms. During this discussion, the informed consent form was reviewed (see Appendix B). Attention was drawn to their voluntary participation and the option to withdraw at any time was emphasized. Potential limitations to confidentiality were discussed prior to the participant signing the consent form (e.g., if the participant makes the researcher aware that they may be of harm to themselves or others, if a reader draws a link between their pseudonym and their real identity while reading this report). Permission was also requested for the session to be digitally recorded. The student researcher and participant then engaged in a discussion of the participant's use of mindfulness and their attitudes on the students' body image using the semi-structured interview questions as a guide (see Appendix C). Guiding questions were generated through an examination of the relevant literature, discussion with the researcher's supervisory committee, and information from researcher's personal and professional background using mindfulness practice. At the end of the initial interview the participant was thanked for their time and

provided with a \$25 gift certificate to a local bookstore or coffee shop as a token of appreciation for providing their time to this research endeavour. The student researcher transcribed all of the digitally recorded initial interviews and sent the transcripts to each participant by email for them to review and edit to best reflect their experiences. The student researcher then scheduled follow-up interviews with each participant that allowed each participant to review and discuss the transcribed responses. Care was taken to maintain the confidentiality of the participants by assigning pseudonyms to each individual or any identified children and through discussion with each participant to ensure their satisfaction with the transcript as it was presented. A transcript release form was signed following this review (see Appendix D). Lastly, each participant was encouraged to indicate if they would like to receive a copy of the results of the study following completion.

3.6 Data Analysis

Analysis of the transcribed interviews that were reviewed and approved by each participant occurred simultaneously with data generation to examine preliminary themes and assist in determining when data saturation had occurred (Saregant, 2012). In thematic analysis, data saturation occurs when “no additional themes are found from the reviewing of successive data regarding a category being investigated” (Ando, Cousins, & Young, 2014, p. 1). Thematic analysis guided the data analysis process as “a method for identifying, analyzing, and reporting patterns (themes) within data that minimally organizes and describes your data in rich detail” (Braun & Clarke, 2006, p. 79). Hölzel et al.’s (2011) Four-Component Theoretical Model informed the coding process, or identifying, analyzing, and reporting themes in a meaningful way (Braun & Clarke, 2006).

Data was analyzed reflexively, which included being aware of the biases, values, and experiences that the researcher brought to the study (Creswell, 2012). I have been personally involved in mindfulness practices for seven years and has a generally positive attitude toward mindfulness. While this awareness has helped the student researcher to bracket herself out of the study, it is possible that the student researcher’s attitude may have influenced the interpretation of the results (Creswell, 2012). Reflexive analysis is not a linear process, and instead involved movement throughout the phases of data collection to allow for thick, nuanced description (Braun & Clark, 2006; Gall, Gall, & Borg, 2007). Specifically, the data analysis occurred over six steps (Braun & Clark, 2006). First, data analysis began with an initial reading of the data following

transcription to determine first impressions, meanings, and ideas, which were coded and noted. This phase was characterized by initial revisiting of the audio recordings, becoming familiar with the data through transcription, and multiple readings alongside the audio recordings to ensure accuracy and to pick up on non-verbal cues (e.g., inflections of the voice, hesitations) that added an additional layer of information to the interpretation. The next phase involved *generating initial codes*, which consisted of pulling out interesting concepts and transferring them to be manipulated and examined for patterns. To do so, each transcript was highlighted with colour codes and summary notes were made to begin organizing the data (Braun & Clark, 2006). The third phase is also known as *searching for themes* which consisted of gathering the information organized by the coding in phase two, and grouping the data into potential data columns via Excel. During this phase, there were multiple potential groups, which were combined into a set of broader categories. Phase four included *reviewing themes*, reworking themes that do not fit, and refining multiple similar themes into less, more cohesive themes. The themes were reviewed in context with Hölzel et al.'s (2011) model to assess the applicability of the theoretical framework to the generated categories. Any outstanding participant quotes applicable to these categories were added to each respective theme, after which the most meaningful and rich quotes were selected for inclusion in the final report. Phase five included going back into the data to get a second impression of possible ideas and themes to pull out. In reality, this theme consisted of confirming the themes collected through additional readings of the transcripts and relating them to the research questions and the theoretical framework. Each theme was given a name describing the essential meaning of the category. Finally, the sixth phase was the *production of the report* using the final themes from analysis. The results were presented independently first with a discussion linking the themes to the theoretical framework and the existing literature following the results. Finally, the report was edited for clarity and accuracy of expression.

3.7 Trustworthiness

The extent to which the reader of qualitative research can trust the results and interpretations of the data is called trustworthiness (Merriam, 2009). There are four components of trustworthiness, which include credibility, transferability, dependability, and confirmability. .

3.7.1 Credibility. Credibility refers to the validity of the interpretations of the research in matching reality (Merriam, 2009). Care was taken to achieve credibility through gathering multiple sources of data to provide depth of observations (Merriam, 2009). To accomplish this,

multiple individuals from a variety of backgrounds (e.g., school settings, yoga practices) participated in the study and offered diverse opinions (Merriam, 2009). Secondly, the questions of the semi-structured interview were designed to avoid confirmation bias (i.e., they have been framed in a way to elicit true and open responses, rather than in an “agree or disagree” scenario; Lincoln & Guba, 1985). Third, the consent process for the interview clarified that the all names will be changed within the report to support confidentiality and to avoid any anxiety or trepidation of providing negative responses (Shenton, 2004). Anxiety in this context may occur for reasons that vary with each participant, however, likely sources of anxiety include being identified within the report, particularly if feedback for programming is negative, and general anxiety from being placed in the novel situation of being interviewed for a research study. To further alleviate anxiety, follow-up interviews were intended to bring up additional points that the interviewee may have either forgotten to mention in the initial interview or left out due to anxiety during the first session. Lastly, the data analysis by the researcher occurred in collaboration with the participants and the thesis supervisor to provide feedback regarding the accuracy and credibility of the analysis (Pitney, 2004). Sharing these impressions with the participant for feedback is known as *member-checking* and directly tests the interpretations with the “human sources from which they have come” (Lincoln & Guba, 1985, p. 301).

3.7.2 Transferability. Transferability is defined as “the degree to which the results of qualitative research can be generalized or transferred to other contexts of settings” (Trochim, 2006, para. 4). It is ultimately the reader’s judgment that determines the transferability of the data provided (Merriam, 2009). To provide the reader with a rich description of the context of the study, a variety of information essential to interpretation was included within the report (e.g., background, demographics of participants, length of practice, direct quotes, etc.) to allow the reader to adequately judge the applicability of the study (Conrad & Serlin, 2011; Lincoln & Guba, 1985).

3.7.3 Dependability. Dependability is defined as “seeking means for taking into account both factors of instability and factors of phenomenal or design induced changes” (Lincoln & Guba, 1985, p. 299) to account for an ever-changing context within which research is conducted (Trochim, 2006). It is the researcher’s responsibility to describe the changes that occur during the study and how they affect the interpretation and conduction of research. To achieve dependability, the researcher maintained thorough notes through the interview process and

consulted audio recordings of sessions frequently to help with accurate data analysis. A research journal helped with preliminary analysis alongside data collection to allow the researcher to recollect moments in the interview that were essential for analysis (Golafshani, 2003). Further, member-checks allowed the participant themselves to assess the researcher's accuracy and completeness of interpretations to increase dependability (Pitney, 2004).

3.7.4 Confirmability. Confirmability refers to the neutrality and accuracy of the data, or otherwise as the degree to which results might be “confirmed or corroborated by others” (Wester, 2011, p. 1). Confirmability was established through the use of an audit trail, which documented the entire course of analysis. In an audit trail, the researcher makes explicit all decisions throughout the research process through maintaining research journals, maintaining a research log, and documenting all activities (Creswell & Miller, 2000; Koch, 2006). This data is subject to an auditor or second party that is familiar with the data to offer confirmation or critique on the researcher's findings (Lincoln & Guba, 1985).

3.8 Ethical Considerations

The primary ethical concerns that were necessary to be aware of included the protection of the participants' confidentiality and ensuring that participants were aware of their rights through informed consent (APA, 2002; Sales & Folkman, 2000). Specifically, it is not possible to ensure confidentiality as the community practicing mindfulness within the Saskatchewan region is relatively small. However, all names of participants and children that were mentioned were changed to pseudonyms or removed from the transcript. No identifying information (i.e., birthdate, area) was provided within the report (APA, 2002). All paper and audio data with identifiable names (i.e., informed consent form) will be properly stored for the requisite five years in the office of the researcher's supervisor Dr. Laureen McIntyre, in the Department of Educational Psychology and Special Education in fulfillment of University of Saskatchewan regulations. The informed consent process was regarded as a process in which participants were encouraged to ask questions, to review their rights and guidelines, and reminded of their right to withdraw from the study at any time through the process (APA, 2002). The researcher's contact information was made available for questions following the initial sessions. Finally, ethics approval was granted from the University of Saskatchewan Ethics Board before commencement of the study (Beh #17-71).

Chapter 4: Results

This chapter introduces the eight teachers who participated in this study and presents their insights as they pertain to the body esteem of the children they teach, the benefits and drawbacks to their forms of mindfulness practice, and their overall experiences related to how and why they use mindfulness within their classrooms. In order to protect participant confidentiality, pseudonyms were chosen with help from the participants themselves. Participants' quotations were often edited to protect their confidentiality and for clarity. To do so, real names were changed or eliminated and filler words (e.g., um, yeah, you know, like, just) were deleted. Themes were generated through the six steps of thematic analysis, and Hölzel et al.'s (2011) Four-Component Theoretical Model was used as a guiding framework for defining and naming themes from the information gathered from the participants through their interview responses (Braun & Clarke, 2006)

4.1 Participants

Ten individuals responded to the call to participate. However, only eight of these individuals met the inclusionary criteria established for this study (i.e., currently an elementary educator for Grades 2 to 5 within the Saskatchewan region, had been using mindfulness within the classroom for a minimum of eight weeks, and were willing to share their experiences using mindfulness across an interview and follow-up procedure) and agreed to participate in the study. All eight educators were female and taught regular stream classes. However, they all mentioned that there were a variety of different needs within their classroom. Although there were many similarities within their stories, Aly, Brie, Lena, Julia, Charlotte, Trista, Seren and Josie all had a unique perspective, which added richness and depth to their contextualized accounts.

The first participant to be interviewed was Lena, a 27-year-old resource and special education educator with a background in English and Psychology, who was involved with teaching some of the curriculum across all of the grades in her school (Grade 1-12). For the purposes of this interview, she spoke solely about her experiences with younger children (Grades 2-5). Lena's mindfulness practice was inspired by a particular connection to art and an identified need to educate her young students on the importance of cultural connection and celebrating our differences. Lena uses mindfulness colouring books, music, and art; and weaves her practice

throughout the different subjects in the curriculum. Lena does not have much personal experience using mindfulness, however, she appreciates the practice for its usefulness within her classroom.

The second participant, Brie, a 33-year-old educator in Grade 5 has been a trailblazer in bringing mindfulness into the curriculum in her school district. She has been delivering mindfulness programming to her class of 29 students, of which about half have a variety of needs that are “inhibiting them from learning to their full potential”. Brie began her journey of using mindfulness in the classroom one year ago when she began using the MindUp curriculum founded by actress Goldie Hawn. Brie has expanded her programming since then and has sprinkled the curriculum with her own creative mindfulness practices. Brie’s personal use of mindfulness has expanded since she began using mindfulness practices within her classroom to include regular yoga classes when she needs a boost of positivity within her own life.

The third participant, Aly, a 38-year-old educator also in Grade 5 has focused her mindfulness practice on individual students that need particular help managing stress and anxiety. In particular, Aly’s classroom has 22 regular stream students, however, she targets her mindfulness programming to her four other students with a variety of stress and behaviour-related concerns. She has taught for over a decade and has been using mindfulness interventions within her work for two years. Aly’s personal experience using mindfulness is relatively limited, but she has used yoga as a form of relaxation.

Julia, a 41-year-old educator in a community school, was the fourth participant interviewed. Julia was an itinerant teacher teaching physical education, health, and the Kindergarten and Grade 4 curriculum within a community school. She noted that while she teaches regular stream children, there are a variety of needs in her school stemming from low socioeconomic status, physical difficulties, and diagnostic barriers to success. Julia has a vast knowledge of mindfulness that she has accumulated since first embarking on her journey using mindfulness at the beginning of the school year. Julia’s use of MindUp curriculum, yoga riddles and games, and breathing exercises has been positive and has inspired her to embark on her own yoga teacher training, which she expects to complete in the near future.

The fifth participant was Trista, a 48-year-old educator who teaches a regular stream Grade 5 class, with some children experiencing notable physical difficulties. Trista was very conscious of the emerging issues that children at her grade level face and was self-motivated to research new interventions and has invited speakers to open discussion about difficult issues. Trista’s

creative and extensive approach to mindfulness was both formal and informal, and allowed the children a great deal of self-expression and self-direction within the classroom. Trista's use of mindfulness within her classroom has prompted greater personal use of the mindfulness principles in her spare time.

Charlotte, a 42-year-old educator in Grade 2, was teaching a regular stream class with some children facing notable anxiety and trauma. Charlotte has been teaching for a decade, of which she has been using mindfulness in her classroom for the past three years. Charlotte was particularly interested in the science behind such techniques like mindfulness and liked to infuse her MindUp curriculum, videos, and books on mindfulness with education about the brain and how mindfulness impacts her children's thinking. Charlotte personally practiced mindfulness in her own life as a way of slowing down when life gets busy.

Seren, a 39-year-old educator that was teaching Grade 2, has had multiple years of experience working in both a community school setting and a more affluent school setting. Over the years, Seren has learned how to tailor her mindfulness programming to use with children with a variety of different needs. Seren was not regularly using mindfulness practice on her own time, however, she has found that it can be helpful occasionally in her day-to-day routine and when stressors begin to build

The last participant, Josie, was a 24-year-old educator who was relatively new to the field. Josie began using mindfulness during her time teaching overseas and during her time working in a Christian school in Saskatchewan. Josie offered a unique perspective due to being able to link her mindfulness practice to the Christian values and prayer taught at her school. Josie reported she likes to practice mindfulness and yoga in her spare time, often linking the practice to her spiritual values.

Participants engaged in an interview with the student researcher in order to explore their insights into the impact of mindfulness on children's body image and how they experience using their various forms of mindfulness in their classrooms. Following a review of their stories, six major themes were identified that coincided with and Hölzel et al.'s (2011) Four-Component Theoretical Model: (1) The Minds of Mindfulness: MindUp, Tech-Minded, and the Creative Mind; (2) Tools in the Toolbox: Kids' Personal Use of the Language and Techniques of Mindfulness; (3) Capability and Confidence; (4) Differences and Diversity: How They Affect Body Image; (5) Teacher Talk: How Teachers Aren't Hearing About Body Image in Their Young

Classes; and (6) The Drawback Duo and the Benefit Bunch. These themes are discussed and linked together using meaningful participant quotes.

Table 1

Results of Thematic Analysis

Overview of the Six Themes

<u>Theme</u>	<u>Description</u>
The Minds of Mindfulness: MindUp, Tech Minded, and the Creative Mind	<ul style="list-style-type: none"> • Participants identified three main modalities of mindfulness within their classrooms: the MindUp Curriculum (The Hawn Foundation, 2011), videos and media to teach techniques, and artistic methods, such as colouring and music. • Most participants used a combination of these methods to creatively structure their own programs and iterations of mindfulness.
Tools in the Toolbox: Kids' Personal Use of the Language and Techniques of Mindfulness	<ul style="list-style-type: none"> • The mindfulness programming that the participants used provided students with a common language to describe their physical brain anatomy, their emotions, and the techniques of mindfulness. • Children tended to request mindfulness exercises on their own, and generalized the practice to other areas, such as at home.
Capability and Confidence	<ul style="list-style-type: none"> • Participants noted that when children talk about their bodies,

	<p>they tend to talk about their bodies in terms of what they physically are or are not capable of.</p> <ul style="list-style-type: none"> • Participants discussed how mindfulness fosters a “growth mindset” in their students, which allows them to believe that they can achieve goals, rather than that their abilities are fixed.
Differences and Diversity: How They Affect Body Image	<ul style="list-style-type: none"> • Participants found that two other issues come up for them in terms of children’s confidence: race and gender orientation. They discussed that their mindfulness practiced has helped to address these issues.
Teacher Talk: How Teachers Aren’t Hearing About Body Image in Their Young Classes	<ul style="list-style-type: none"> • The participants reported that while they occasionally hear of body image concerns in their students, few students typically report body image concerns in terms of weight and shape to their teachers. When teachers do begin to hear this type of talk, it is often not until the older grades in this study (Grades 4-5).
The Drawback Duo and the Benefit Bunch	<ul style="list-style-type: none"> • Participants noted two main drawbacks to the use of mindfulness in the classroom: spending time preparing for the programming and away from the curriculum, and initial scepticism of the children to try the techniques.

- They also noted two main benefits other than an increase in confidence: a calming effect on their students, and an increase in focus on academics.

Table 1. An overview of the six themes generated in thematic analysis.

4.2 The Minds of Mindfulness: MindUp, Tech-Minded, and the Creative Mind

Although all of the participants were using mindfulness within their classrooms, it became quickly apparent that mindfulness does not come in one-size fits all packages for use with elementary students. Each participant had a unique approach to mindfulness, often merging formal, structured practices (i.e., MindUp, applications such as GoNoodle) with informal, inspired practices that they tailored to fit their individual classrooms and students.

4.2.1 The creative mind. Aly, Trista, Lena, and Julie’s accounts of their use of mindfulness uncovered how their programs were designed to invoke the creative side of the child. A recurrent idea that was explored within mindfulness was the use of sounds. Aly discussed using music for the students in her Grade 4 class: “I use “chill time” after a hectic class to bring the students “down” and help them to refocus. This is done with heads down, eyes closed and listening to relaxing music for about 5 minutes.” This practice is modern and easily adjustable for the students in her class, in which mindfulness “is reinforced more specifically with the students who need it most.” Lena’s practice also appeals to the creative side of her students between Grades 1 to 4 with modern cultural music layered over mindfulness colouring sheets, which she feels adds to the focus on the present moment:

If I play Bollywood [for example], they kind of want to hear it so they don’t talk as much, which is kind of counterintuitive. I would have thought that soft, quiet, soothing music would be better, but the more kind of upbeat, they want to hear it. The quiet is so easy to drown out with talking that they just do, because they’re like “I can’t hear it anyways so I’m just going to talk.”

Julie, Brie, and Trista utilized more natural, traditional, earthy sounds in their mindfulness practice to help centre the students using their breath. Trista, for example, has a chime to call everyone together for mindfulness practice and she utilizes a rain stick “for various reasons” in her practice. Julie explained her use of an Indian symbol to “make a sound and try to keep breathing, doing the deep breathing, in and out, until you can’t hear that sound anymore”. Brie’s use of sound is quite similar to Julie’s, as it is a way of anchoring the breath, however, Brie adds the component of visualization.

There’s other activities we do to help them calm down, like if they start hearing me doing this (rubs hands), then they will start doing this (rubs hands) and then they’ll (snaps fingers). It’s kind of like making a rainstorm. Then they’ll start stomping and clapping and it settles them down and it helps them just visualize a rainstorm and the chaos of it and then the rainstorm leaving. When they picture a rainstorm, it’s like the thing they are mad about or the thing they are stressed out about and then it goes away.

With young kids, it helps to make mindfulness strategies concrete, tangible, and engaging through stories, books and tools to help with visualization. Trista utilized a mindfulness basket as a concrete tool to help the children in her class with visualizing and monitoring their thoughts as they occur, and to help them stay within the present moment through art.

I have a basket in my class that the students, if they’re doing a mindfulness break, if they have a thought that’s in the future, they put it in front of the basket and then they get it out of their mind. If it’s from the past, they put it behind the basket, and if it’s in the present, they can put it in the basket and then clear their minds again. I like having something tangible for them because it helps them visualize better what the goal is. We use mindfulness in art.

Trista and Charlotte also used picture books within their classrooms to help make mindfulness more manageable for students to grasp. In particular, Charlotte mentioned the use of a book called “Sitting Still Like a Frog” by Eline Snel (2013), an engaging story intended to provide children with a concrete model of how to make their bodies and minds look in order to be calm. Julie’s picture books served a similar purpose:

I used lots of picture books for mindfulness. Peaceful piggy, there's one about a cow, about what does it mean to be present. There are lots of really good picture books. My class, they really like the books and it didn't matter if I read it to kindergarten or to Grade 4, the books just mesmerized them, the books are really good.

Games are also a fun and creative way of engaging students to embark on the difficult, abstract journey that is mindfulness. Brie explains that she uses "silent games to tell someone where to move, where they have to be aware, that are more fun for [the kids]". Julie, who has a solid background in yoga, helped the kids in her class to come up with their own game to make mindfulness something of their own.

Then I started to get into children's yoga and I had a couple picture books. I just started off with yoga riddles and [would read the students] the riddle and then we learned the [corresponding] pose. We would do that in class, or in the gym, that would be the beginning of our gym class. Once we learned the pose, we would turn it into yoga tag as part of our warm up. When you get tagged, you have to go into that pose and then they had to come up with how we get out of the pose, like in freeze tag, how do we get out. So if you're in downward dog, they said, "Well, we'll crawl under them". If they're doing the plank, the crab plank one, then they have to step over them. They were doing the rainbow pose, they had to high five them, so they always help me figure out how we're going to get out.

Games were an ideal form of mindfulness for children within the classroom environment; however, technology is an all-encompassing force in both schools and the world on a larger scale. Therefore, teachers also commissioned technology to help deliver their mindfulness-based curricula.

4.2.2 Tech-minded. With minimal training in delivering mindfulness programming and a desire for children to have a tool to access at any time, teachers often turn to technology to help disseminate information. Josie, for example, discussed the use of an application called GoNoodle, which can be accessed either on the Internet or through an application on a device, such as an iPad or iPhone. Josie describes the program as accessible, easy, and fun to use:

This app that is called GoNoodle, I don't know if any of your other people talked about it, but it's the way I use mindfulness in the classroom, and it's this awesome website where you have a little character that you choose and every time you do a video on GoNoodle, either a workout video or a mindfulness video, your little character gets bigger and bigger, and once you watch ten videos it evolves. The kids are obsessed with it. We have so many categories you can pick from, but there is a specific category of mindfulness, so it was like the easiest way to start incorporating it because it didn't take a lot of thought, it was just there. I feel like what I have is so good for young kids actually and I generally work Grade 1 to 4 or 5. I don't think I had to adapt it because of the age I teach at, but I feel like I was in an older grade, I would have to find something else, but for Grade 1 to Grade 4-ish, or 5, it's just awesome. And it's a free program; it's just really good.

Josie reported that the kids respond enthusiastically to the program, mentioning that there are "all different categories within the mindfulness section, which include enhancing focus, practicing self-control, building compassion, and managing stress", all which can be excellent for helping children deal with the negative effects of having poor self-esteem in relation to their bodies. Charlotte also uses technology within her mindfulness curriculum, sticking with familiar characters explaining mindfulness techniques via video:

There's a great video called "Belly Breathe with Elmo", so they start with that as well. They learn to breathe with Elmo and they learn to calm, so it's really exciting for them and it grabs their attention.

Charlotte and Josie seem to agree on the engaging, visually stimulating, and rewarding qualities of the multimedia tools that they use to present mindfulness to the children in their classrooms. Charlotte also discusses using breathing techniques prior to "delving into the brain", using a program called MindUp, a formal, structured program that was by far mentioned the most by the teacher-participants in this study.

4.2.3. MindUp and formal programming. The predominant practice noted by most of the participants was MindUp, a structured mindfulness-based curriculum, which is sectioned for use based on age/grade, with three iterations currently published (Pre-K to 2nd Grade, 3rd Grade to 5th Grade, and 6th Grade to 8th Grade; The Hawn Foundation, 2011). The intention of the

curriculum is to teach children about their brains, what is happening when they feel overwhelmed or anxious, and to give them strategies to use both as a class and on an individual basis. Examples of lessons within the curriculum include knowledge and anatomy of the brain, mindful breathing, practicing optimism and gratitude, and engaging in acts of kindness. MindUp has been linked to improved prosociality, increased well-being, improved stress physiology, and improved school success in youngsters completing the curriculum (Maloney, Stewart Lawlor, Schonert-Reichl, & Whitehead, 2016). Brie, Julie, Charlotte, Trista, and Seren all used MindUp either to supplement their mindfulness curriculum or to on its own. Julia utilized the MindUp program in her Kindergarten and Grade 4 health curricula, and noted the various components of the program that stand out as beneficial to her students:

Another good program that I've been following, it's called the MindUp program, there's a whole section in here on present moment, eating, all the senses. There's lessons, and it's excellent, so they all are aware of what it means to be a mindful eater and using your eyes and smelling. It's a very good program, very easy to follow.

While Seren noted that MindUp has the same beneficial components noted by Julie (i.e., “smelling, body awareness, how to self-regulate and calm down, how to understand and name their emotions better”), she noted that the program may sometimes be too easy to follow, stating that at times it may be too simplistic:

I think the pace has to go quicker. The kids are on pace at the community school, but this school I would probably use a quicker pace to do lessons. I would never spend that much time on some of these lessons, on tasting and all that even to teach parts of the brain, you know. These guys will understand it faster than they think with the big words that are the parts of the brain.

Brie also began using the program, explaining that while she felt the program was the right fit, she echoed Seren's concerns with the appropriateness of the levels of the MindUp program:

It was the right program, right set up for us, but the elementary stuff for Grades 4, 5 and 6 seemed really a little bit immature for the kids, so then we took from the junior high stuff because it seemed a little more into what they're in.

However, as Seren noted, she felt that her Grade 2 class would respond better to lessons that teach the students more about the neurophysiology of the brain. Charlotte, who is also using MindUp in her Grade 2 class, noted that her children also believed in the program much more strongly when supplemented by scientific discussion of the brain on mindfulness:

We're getting into the information about the brain, that's at the older level. I go even further, we pull up the images of the brains that are being scanned, you know doing functional MRIs to see exactly what's happening in your brain when you're learning, listening to words when you're learning, looking at words when you're learning, so they're seeing all of that because at the beginning of the year, I have some boys who were not buying in. Not believing that this could actually help out.

Looking back at the older grades, Trista believed that her Grade 5 children benefit from learning about their brains and that her students are able to grasp the rather difficult terminology of the brain and its anatomy. Specifically, Trista noted that the lessons are "ideal for the age group that [she] teaches" and that she "always finds them talking about parts of the brain and 'Princess Amygdala'" because they have "no problems remembering that part of the brain because they can relate to it with various stories". In Brie's classroom, the instruction about the brain within MindUp was a major factor in helping her to decide that the program would be the right fit for her children:

We heard about this MindUp program by Goldie Hawn and, and we were like "Let's try it". It talks about the brain and talks about how you can open your brain so that you can learn better and all these things that are a problem and are closing off your brain to learning. [This program is] going to hopefully open them up. We didn't research the program completely fully, I was just sold at let's be mindful and be aware and let's try it out. We decided we would do [MindUp] first thing every Monday morning, where we do a mindful lesson on how we can learn about our brains and what's happening. We started

off looking at what are the things that stress us out and the things that shut down your brain and things that cause anxiety. Why aren't you learning? These are the parts of your brain that are turning off your learning. They learned about the amygdala first and then they, once you opened up the amygdala, where does that learning go and how does all of the new information, how does that get stored and it's pretty cool.

Even further, Brie noted that learning about the brain has been perhaps one of the most beneficial components of mindfulness for her Grade 5 class, particularly in terms of self-acceptance:

So about self-acceptance, I would say [they've learned] more about who we are in general, like I am different because I've been through this and this is how I have to handle it because my brain has these pathways but I need to create these [other ones], so more about their brains not necessarily their bodies.

These last three points draw us into discussion of our next two themes: how programs such as MindUp help kids to transfer the emotional and brain-based language to their tool belts to use for later ("Tools in the Toolbox") and how understanding that capability is flexible and can change a child's outlook ("Capability and Confidence").

4.3 Tools in the Toolbox: Kids' Personal Use of the Language and Techniques of Mindfulness

Even through each teacher's personal and unique take on mindfulness within the classroom, some of the most resounding commonalities in all eight stories were the kids' spontaneous use of the emotional language learned in the mindfulness programming, of using the techniques on their own in various situations within and outside of the classroom, and of the use personal sense of control over their own lives that the mindfulness practice allowed them to take hold of.

4.3.1. Learning the lingo: How kids use the language of mindfulness. Some of the more structured programming mentioned, such as the MindUp program, offers a whole new vocabulary to children in regards to their brain, its anatomy, and new ways of expressing themselves emotionally. Aly appreciated the new vocabulary, stating that it clarifies communication by "providing a common language and general understanding to all staff and students." While the

new language learned is often tough and technical, kids seem to love using it and parents and teachers alike are stunned at the use of these terms in their regular discourse. As Brie stated:

[What] the parents love the most is that these kids understand why I'm feeling the way I'm feeling, they can just verbalize it a bit better. And then it's so funny, I had a mom mention something like, "It's so funny Steve says, Oh that's cause my hippocampus blah blah blah", and I don't even remember what he said, but he used the word hippocampus in a sentence correctly.

As surprising as the kids' newfound language development is, seeing as most parents and teachers do not expect their children to have an understanding of anatomy at the age of seven, Charlotte believes the children truly do understand the language to a level that's deeper than expected.

Yeah, and they use the language. They use the language and from what I heard from the parents at the beginning of the year is "I can't believe my kid's coming home and talking about the amygdala and telling me what the prefrontal cortex is" and they know exactly what they're learning.

Trista explained that the children may latch onto the language by means of attaching the words to stories that they can tell themselves later to help them use the words effectively while on their own. Trista assigns each brain part a character, which helps to trigger the children's memory about what that brain part is responsible for in relation to anxiety and mindfulness.

I always find them talking about parts of the brain and "Princess Amygdala", they have no problems remembering that part of the brain because they can relate to it with various stories.

Trista further explained that the necessity for a common expression of emotions is essential, seeing as kids at the age of 9 to 10 (as are in her 5th Grade class) are starting to experience intense emotions that are more common as one gets older. Her mindfulness program, MindUp, helps them to put names to the emotions and to understand why these emotions occur

on a scientific basis. She also mentions that she utilizes a mindfulness journal to enhance use and understanding of this emotional language. As she explained:

We talked about strong emotions [because] hormones start to come into play in my grade, sadness, anger, all kinds of things and we talked about how we're all the same, how we have all these same emotions.

A firm understanding of the language allows the children to be able to express themselves, and to be able to utilize mindfulness on their own accord to both deepen their understanding and as a tool to help themselves when things are getting overwhelming.

4.3.2. I Can Do It On My Own: Using Mindfulness on their Own Accord. Most of the teachers that were interviewed were surprised by just how well their children in their classrooms responded to the mindfulness practice. Brie noted that once mindfulness was regularly practiced within her classroom, it required little prompting for the kids to get into the groove. In fact, it seemed that the basic characteristics of the mindfulness practice were ingrained into the kids' tool belts to the point where they could even help lead the class.

I don't even have to say let's all bang our drum anymore, I don't even say drum, they just hit, and then I just stomp my feet and I do it in fast patterns, slow patterns. It's just to change what they're thinking about and to calm them down, and then they're drumming so it's like a drumming beat pattern that they're doing. Then I will point to somebody and they have to lead us, but they'll have to be active and aware.

Julie's mindfulness sessions in her classroom were structured so that the children had a lot of opportunity to choose their own mindfulness activity, in a very autonomous, self-aware form of practice. She explained the variety of options given to her children as an opportunity for them to "come in and sit down quietly, [where] they could put their head down, close their eyes if they wanted to, or grab a book". Josie was stunned to see how quickly her kids in her class caught on to her use of her GoNoodle videos in class and to the mindfulness colouring. Many times the children ask her if they can use the mindfulness videos on their own accord.

A lot of them go home and they know all the videos so they say “Oh, Madame, can you put on the video?” and they already know them all and they love the mindfulness ones which I was really surprised. I didn’t think they would, but they do.

Josie also noted that the children would take their own initiative to understand their own emotions and level of anxiety. Specifically, one student would tell her that she needed “just five minutes to colour” when she needed to calm down. Charlotte agreed with Josie, stating that the kids don’t always have to verbally ask to practice mindfulness, but rather just give a signal that they need to “take that time to calm down to become present”.

Josie explained that the kids started to learn the language from the videos and also used it to hold each other accountable:

They just catch on, you watch these videos so many times. They start learning the sentences that they’re saying and repeating them. So I feel like it’s really beneficial.

When kids are being bad and talking, being silly, they will keep each other accountable and they’ll be like “No, stop, we really need to focus” and just “Calm down!” They really liked it.

It appears that the spontaneous use of mindfulness doesn’t stop when the children are in the classroom. Parents have provided positive feedback to Brie, who said that the parents have seen a “big change for them” at home. Trista also noted that she “knew that mindfulness had a real impact when parents were talking to me about the benefits” and that the kids are reporting using the mindfulness practices and terminology at home. Julie had a similar experience and noted that:

I think the breathing exercises have helped kids that are in difficult situations. Some kids have told me “Oh, I went home and, and I had to practice that deep breathing”. So with those kids I’ve used the stories and the breathing just to give them another strategy to help deal with their anger. I think it does help them with their anger management and self-regulation, another strategy to regulate.

The children seem to fully grasp the idea that mindfulness has helped them to adapt to their environments, to their stressors, and to gain some control and self-regulation over their

behaviours and emotions. Seren told a story of a child that had difficulty with self-regulating, but reported using the mindfulness spontaneously to help himself to sleep:

Last year in check in one time, which is about how are you doing that day, what happened last night, what happened this morning; a kid actually referred to the program without knowing it. He was like, and it's a hyper kid, he's very unregulated and he's like, "Last night I couldn't sleep, so I started breathing from my belly and I just fell asleep." I was like, "What, oh cool!" He wasn't even in a lesson, he wasn't trying to answer a question or perform so he's actually using it in context.

Trista ended off by stating that the mindfulness practice has become very organic and natural to the kids in her class. They understand when and why to use the practice and how it helps them to become more focused and calm.

They really like it, and the reason I know they like it is because they'll come in sometimes and they'll say "Can we have a mindfulness break right now?" And at first I thought, "Are they trying to waste time, like what is it?" They're like "No, we really had problems on the playground. We just want to settle our minds." I'm like, "Yes, let's do that." They'll say, "We really need a mindfulness break now, we had a body break but we're still unsettled" Okay, sure, let's have a mindfulness break. It's very organic.

The kids have demonstrated that they have a newfound understanding of their physical and emotional needs, which helps them to gain a sense of control over difficult emotions and sensations through mindfulness. This may have a huge impact on body image if those strong emotions come up.

4.3.3. I've got this: How mindfulness influences a sense of control. Aly shared "Mindfulness is one's awareness of their feelings or actions at a particular time. Being mindful means you can recognize and adjust those feelings or actions, using strategies if needed." Aly's quote leads us on this section of how mindfulness increases the partaker's knowledge of what they are feeling so that they can recognize when they are content and when they need to adjust their focus to help them calm down, focus, or become better learners. Seren shared a story that

illustrates how mindfulness has helped kids to be more aware of their bodily sensations and feelings to that they can be more successful learners.

We have kids and they'll be just like, bouncing around, not doing their work, just totally out to lunch and it's like, "Bobby, why aren't you doing your work?" and two seconds later, "Bobby, what are you doing?!" and you keep finding this kid, and you get busy with another, but you keep finding this kid that's not doing their work again. So finally you lay into him hard and you say "What's wrong?" and he says "I'm hot". Well, you look and there's a t-shirt, there's a bunnyhug, there's pants, just real thick socks and boots they never took off from when they were outside and it's like, "No wonder you're hot, take that sweater off!" and then they take it off, they get a drink and all of a sudden they're working like a bandit. So creating that self-awareness, especially for the sensitive kids in the room who are going to be thrown off by being hot or being hungry, I think that's been a real plus too.

As Seren explained, there have been improvements in self-awareness in her children in her classroom. Being self-aware is a cornerstone to being able to self-regulate, and Brie provides some insight as to why self-awareness helps to give her kids in the classroom a sense of self-control:

Being aware, having your students take a step back and really realize what is controlling them, what's driving them, and how to switch what they're doing when they're becoming out of control. They can control themselves and [they realize] that it isn't out of control and you can choose to learn how to be in control.

Josie explained that teaching her students tools through her mindfulness videos (i.e., "Mindless to Mindful") has helped her students to realize that they are in control and "can actually start listening and behaving". In Trista's classroom, she tried to nudge the children in the right direction by asking them "when they think they can find opportunities to use mindfulness throughout the day without an adult saying 'This is a good opportunity for mindfulness.'" Julie also opened discussion with her children about where mindfulness might be an appropriate choice in the day and had some insightful comments in return:

It's just to bring in strategies for them if things aren't going well in their life or they're feeling stressed out. A lot of their lives, we can't even imagine what's going on like, if you need to like get away from your brother or sister, you can go to your bedroom or quiet place and try some of these breathing things that we're doing, just to give them some ways of dealing with it. I asked them the other day, I said, "Why do you think I'm teaching you all of this mindfulness stuff?" and one little girl put her hand up and said "It's to help us to be calm now so that we can be calm and patient as we become adults." And a lot of them, you know, they put their hand up and said "to help us relax" which is good too, but she was kind of looking forward to.

Seren shares the sentiment with the others that the mindfulness programming at this level really reinforces the idea of being self-aware and being able to self-regulate on your own terms, which provides the children a sense of control over their own circumstances. However, she also discussed the possibility of adding a self-compassion component to mindfulness as individuals get older.

I think mostly this is body awareness and keeping yourself self-regulated so that you can keep that frontal cortex activated. Self-compassion and meditation, you gotta be pretty mature for that. To meditate, you have to be mature in the first place, cause it's first that and to encompass self-compassion, I don't even know if it's necessary in youth because they don't even know if they're really that guilty or hard on themselves.

While Seren noted that mindfulness has an application for allowing the practitioner to have self-compassion, which can have immense benefits for improving body esteem in children, she believes that the focus is not quite there yet, and that the primary focus for children is still on self-regulation. Brie also noted that the children are only developing "self-awareness about their behaviours and actions more than about the body". Josie, on the other hand, believed that by instilling these skills and outlets from mindfulness now, we set the foundation for children to be able to deal with the stressors that come from negative body esteem in the future:

We have one video that talks about this little tree and this storm comes, and it's knocking the tree over, but the tree can always stand because it's rooted in the ground. It just talks

about how you need to find your roots and you're rooted, so maybe you're gonna have a hard day, but, you can do this and you can get over this and you can face the challenges that are in your way. That one's kind of about overcoming your fears and overcoming challenges, which I find is another part. Mindfulness is a million different things, but they're all good.

Josie, Brie, and Charlotte all helped their children to grow roots through their mindfulness practice. Josie provided an example of helping kids transfer what they know to other situations, by teaching them to "take deep breaths when they get hurt". Brie explained that mindfulness could help to inform goal setting, sharing that her students may be unhappy with their grades, but that "instead of shutting off and getting stressed out", mindfulness helps her students to "plan for the future and change this". Charlotte calls this type of attitude for growth a "growth mindset" in her children, which will lead us into the next theme about Capability and Confidence.

I think it starts with how we think about ourselves. Any time we're thinking negatively about ourselves, again that's that fixed mindset, the world's a big place and as the kids age and go through the older grades, it's going to get harder and your plate's going to get more full and the issues are going to get greater, so I talked to them a lot about the fact that if you're equipped with being able to change your thinking now about yourself, about your abilities, about your disabilities, about your kindness or not kindness, then that will benefit you regardless of what comes your way. I think they see the importance of that as much as they can at that 6 and 7, 8 years old. And they do, they do change their talk. So I think it is, I think mindfulness and self-acceptance go hand-in-hand. Maybe they will have the tools. I mean it's still going to be a struggle, it's going to be hard, but maybe it won't be as hard? So, yeah! We start talking a little bit earlier about body image.

Charlotte begins the discussion on how mindfulness will help provide students with tools as body image stressors become larger in their lives. One of the tools that mindfulness provides is that of capability which undoubtedly influences a child's confidence. A beautiful quote summarizing the benefits of mindfulness in terms of control over one's body image will close this section.

The benefits are that they know they're responsible for their own learning and their own thinking. It's not something that we as adults can force them to do. And giving them that ownership, so whether it be about body image, whether it be about a fixed mindset, or a challenge they're facing in their life, with the strategies that are being taught, then they are empowered to be in control of themselves.

4.4. Capability and Confidence

Each participant was asked about their perception of how the children in their classes view themselves in terms of their body image. Most teachers did not mention anything in terms of the traditional view of body image, such as weight or shape. However, they mentioned body image in terms of what the children are able to do with their bodies and how mindfulness helps to transform their thoughts about their capability through fostering a growth mindset.

4.4.1. Capability and body image. While listening for messages of negative body esteem in their children within their classes, the teacher-participants noticed that the majority of the talk about bodies have to do with perceived inability to do physical activities with their bodies. Josie noted that she hears most of the talk during gym class, which is where kids' physical ability is put on display.

Kids that are overweight tend to say things during gym. If they're slow at running then I've heard them call themselves fat and stuff before, but I don't feel like they talk about it as much as if you get into the older grades.

In this excerpt, Josie noted that the kids do make reference to their weight and shape, however, they mention it in terms of finding it difficult to run. Brie's account supported Josie's point, stating that the kids in her class will worry that they are "too big" or that "people will drop me" in gym class, despite their actual physical characteristics. She also mentioned that it "inhibits the children from trying new things" or from being "comfortable in a new situation". Julie also noted that much of the chatter about body image comes up on the physical education stage.

In teaching Phys. Ed., I have a lot of kids that just say "I can't do this". They don't even have the patience to give anything new a try, which is different from I think what it used to be. And if they can't get it right the first time then that's, that's it. Some of the girls and

boys don't want to be seen by their peers that they can't do something, so they don't even want to attempt if they think they're not going to master it right away.

Conversely, Trista noted that in her classroom, there are children with visible physical differences due to a genetic condition; however, they derive confidence from their ability to participate in physical activities, which allows them to disregard their physical differences and have a more positive sense of self-esteem. In particular, she claimed that "part of it is that they play sports and they feel the same as everyone". Lena also talked about the confidence in the Grade 1 and 2 children that she teaches. She noted that she doesn't believe they have developed a sense of a negative self-esteem yet, but they instead have a sense of pride in their physical abilities.

They're still kind of at the age where the girls are proud when they're strong. The Grade 1-2 split, the Grade 2 girls are proud when they can run faster than the boys. The fastest runner in our class is a girl and she knows it and loves it. The girls in Grade 1 are little enough that they're wearing tank tops and doing handstands, not really worrying about [anything]. They don't have the self-awareness, and the girls that are self-aware are very proud to be stronger than the boys at this point.

Despite some of the positive messages however, children in Grades 1 and 2 are still experiencing some negative body esteem in relation to what they are able to accomplish with their bodies. Charlotte mentioned some of these issues in relation to the physical ability in the students that she teaches, however, she mentioned that a growth mindset could help boost these kids' self-esteem from a "fixed mindset to a growth mindset".

We start the year talking about growth mindset. I'm finding that in the last couple years of teaching, that children's anxieties have increased and that the negative self-talk has increased and because I knew of some of the kids coming to me from Grade 1, I knew that there were some that are very much with a fixed mindset and so I'm not sure if it's particularly body image related. There are a couple that don't like to try any kind of sport activity, and I'm not sure if that's a body image issue or just a completely fixed mindset.

It halts them from trying. So that's what I see around some of the self-talk and actually it's more of the boys than the girls, and more about is it kind of like the fear of "I can't do it if I try, I can't do it".

4.4.2. The growth mindset. The ideas behind a "growth mindset" were common in the reports from the teachers, and an explanation of how fostering this type of mindset influences body image and confidence. For some teachers like Josie, this idea came somewhat by chance. Josie found that when she used the GoNoodle videos about yoga, her students noticed that they could do stretches and poses that they didn't know were accessible to them before.

I think we always talk being in good physical shape and the videos we do a lot of the time are good for the body, especially the yoga. They don't always understand that it's actually really good for their bodies. So I think they get confidence in that, and they are really confident when they can do the stretches, so I guess they're just realizing more of what their bodies are capable of through mindfulness. They see "Oh, my body's capable of this." It's not so much what your body looks like, but what your body's capable of, focusing on "Oh, my body can actually do these things and that's pretty cool." Being active is also good for their confidence, they notice what they're kind of good at and they feel good about themselves.

Brie noticed similar changes in her students' mindsets during yoga. She provided an explanation as to why yoga is so much more accessible for children that are embarrassed or have difficulty with athletic/physical capacity. Specifically, she explained that in yoga, the focus is on the self. Students can largely ignore what others are doing, and focus only on what is going on with their bodies.

They are using their bodies and they feel confident and they are trying something new. A lot of them never have done yoga before. My non-sporty kids love yoga and they're not afraid to try that, whereas like when you put them in the gym for sports they say, "I couldn't, I don't need to play" you know, "I would rather just sit on the sides and watch, I'll dribble over here". They feel more comfortable because it's all about them and really

there's no focus on anybody else in the room. They're just focusing inward on themselves.

Julie talked about a sense of pride her students acquired, "especially when they master a pose other kids can't. Kids develop a sense of ability in yoga that they never knew that they had." Josie suggested that yoga and mindfulness provide "the stepping stones of focusing on what our bodies are capable of, not what they look like, but being thankful for what our bodies can do." Yoga is also based on principles that with regular practice, you can build yourself up to new accomplishments that weren't available to you before (Iyengar, 2007;Woodyard, 2011). Brie explained that mindfulness could help with any physical accomplishment with a focus on the growth mindset:

A lot of them want to achieve how to do a backflip, how to do a front flip, how to score a three-pointer, how to do some kind of tricks on their scooter or skateboard. Whatever it is, those are usually their goals, nothing to do with school. And some of them aren't in the physical condition where they can do that. So then that is where this kind of pulls in "If I'm aware that I can't do this yet, what do I need to change about who I am to get there?"

Lena mentioned that beyond physical tasks, she noticed her children really responded well to mindfulness colouring. Mindfulness colouring sheets are quite intricate, so completing one is a relatively difficult task with many small parts which requires a great deal of focus. She found that her students have a sense of pride in what they've created, because they feel that "they're making something purposeful". Seren discussed that mindfulness also helps with difficult schoolwork. She talked about incorporating this growth mindset into greater self-acceptance, as a way to help the students look at what is blocking them from getting their goals, rather than believing that they are not possible.

Maybe self-acceptance in terms of "I'm not stupid, I just need something sometimes before I can do my work", "I can do as good of work as someone else, I know I am good, I just need to take care of this first". Those self-acceptance terms of ability in the room,

realizing something might be blocking me but I'm not listening to anyone else. It's that thing, not me.

Josie and Charlotte noticed that fostering a mindset of capability and growth didn't simply affect the children on an individual basis, but that it resulted in an increase of incidences where the children were boosting each other up. Josie shared a story in which the children in her class were complimenting each other on their artwork.

I just remember they were really building each other up more, so I don't know if that's self-confidence, but, it's just being really kind to each other and like when one kid would be like "My picture sucks!" they'd be like "Your picture's amazing" and I just noticed from the beginning to the end that they were just kinder to each other.

Charlotte linked her story back to the use of language, making the connection that they use it to encourage each other and develop a stronger sense of empathy. They have a stronger sense of what is happening when other students are having a difficult time, which provides them with a stronger connection to others' emotions as well as their own.

They use the language and, and every time I hear it, it's beautiful and they encourage one another. So if someone is stuck in their amygdala and that little amygdala monster's taking over, they actually come together and they encourage one another. And so it's still hard when you're hijacked, you're hijacked and you can't hear what's coming through to you anyway, but it's nice to see it kind of coming together and helping. It builds empathy as well.

Brie's version of mindfulness challenged her students to "think positive thoughts about yourself for as long as you can, put your hand up as soon as you can no longer do so", and try to increase the time every time. She also incorporated visualization into her mindfulness practice, which helped her students to imagine themselves accomplishing their goal (growth mindset), rather than the mindset that they cannot achieve it (fixed mindset).

Visualizing or picturing what we want out of the day, our goal for the day. If you visualize it ten times throughout the day, just sitting and picturing their goal for the day and you visualize yourself doing it, and you write down how you're going to achieve your goal. We put up a piece of paper in their locker and they would just look at their goal all the time to revisit it, so it's extra stuff on top of learning, it's different every day, but it's just the strategies that help them.

Brie believed that mindfulness works to help increase children's flexibility from a "can't do" attitude to a "just not yet" attitude by fostering self-acceptance with a focus on the inside as you are now, not just what you want to be in the future, but on achieving those things on their own terms.

I think it does kind of turn away from the body awareness more than the outside shell. It's more about what's inside. Self-acceptance of "I'm okay with being the way I am, I can change certain parts if I want to."

Once again, Charlotte closes off this section by stating that the growth mindset fostered in these mindfulness programs will serve as a tool for children as they walk through life and difficulties with negative body esteem, as one of many potential concerns that they now have the control to overcome.

I think if we teach them at a young age to change that negative self-talk to positive self-talk, then their self-esteem will increase, then their confidence will increase and hopefully those body images when they're older won't be as defined, won't be as challenging. Their little tool belt is full.

4.5 Differences and Diversity: How They Affect Body Image

Although this theme was not as widespread among the teachers, with only four of the eight teachers mentioning anything in relation to diversity and body image, it is too important nonetheless not to mention. Differences in terms of race and gender have always been a part of

popular discussion; however, as of late, gender issues and other issues of diversity have been in the forefront of media discussion (e.g., O'Toole, 2016). Lena was the first of the teacher participants to draw attention to the fact that differences in race, for example, still impact children's image of themselves, or at least cause them to question the differences between themselves and their classmates.

The biggest to worst [issue] we have right now is race because we're a very homogenous school. It's a rural school and there's mostly White kids. We have three, four children in the Grade 1-2 class who would not be considered White. So there's been some...there hasn't been conflict, but they're just trying to figure that out right now. Skin colour's kind of their biggest thing right now as opposed to size or weight. Our big debate was that a kid said, "Oh I need a skin coloured marker, or a skin coloured crayon" and for them, they weren't trying to be rude, I think I said the same kind of thing as a kid. And the one girl who isn't White was like, "You shouldn't say that! I'm brown!" Then her friend quickly came to her so that was kind of one of our transitions was, "What colour do you want?" they would say, "I need skin colour" and it's like, "That can be so many colours! Which one do you mean? Do you mean beige, do you mean brown? Do you mean..." so we've been working on beige is a colour, and brown is a colour, etc.

Charlotte made a similar observation that discussion about race and diversity is essential, so many of their initiatives in school aren't focused on weight or shape, but more so about how to be respectful and appreciative of differences. Trista, on the other hand, talked about diversity in terms of gender, stating that she has had "some students who have identified as transgender" which has prompted "conversations to talk frankly to children about that" and "initiatives to set up a safe space" for these children. Trista helped to avoid some of the negative issues that come from differences at this young age by utilizing her mindfulness practice to draw on exercises that discuss that everyone is different and why that is good.

We did things like drawing the longest line you can possibly draw in your journal with no rules. And then draw dots in the middle of your line. And then the whole idea with the drawing here was to make an analogy so students who wanted to share could share.

Everyone had the same instructions, but the lines and the dots were all different. Just like us and how we approach mindfulness, it's going to be different for everyone. I loved that.

Lena ties her mindfulness practice into a discussion about culture. For example, she uses mindfulness colouring sheets from other countries as a starting point to talk about different cultures, which she feels has made a big difference in the kids' outlook in her humorous account about using "skin coloured" markers.

We've been focusing on different cultures and the art around the world and so we talk about a country and we talk about how would people dress there and where is it and we look at the map and then they read. We talk about it and look at pictures and what do their celebrations look like and then I'll put music from that country on and then they'll colour. In the race sense like I think we've made...I think we've made the fact that people are of different races that the kids are not worried to talk about it. They're not worried about talking about the fact that, "Yeah, my skin is brown and I'm going to pick a brown marker because my skin is brown". That's totally okay. Some of my kids who are White are colouring people with a brown marker.

Finally, Brie added some insight into how she had previously utilized mindfulness in conjunction with ceremonies from the students' cultures.

Everybody was standoffish at first, but once they started doing it, they realized it was good and it made a change for them. They liked doing their morning circle, so it's a good way to wake up in the morning too. We start with the smudge and then the yoga was more like "Let's get our minds awake" by getting our bodies awake.

These teachers have utilized their mindfulness practice to talk about differences in a way that is innovative and adds a whole new layer to the practice in terms of self-acceptance and positive change, which will undoubtedly make an impact for their students in years to come.

4.6 Teacher Talk: How Teachers Aren't Hearing About Body Image in Their Young Classes

Despite the discussion on how teachers believe that their mindfulness practice could improve the kids' body image through boosting their confidence in their abilities and understanding of cultural and other differences, it appears that teachers aren't hearing much about their kids' body image. The consensus among all eight teachers interviewed was that most initiatives remotely targeted toward body image do not start until Grade 5 or older, with even these initiatives lacking a clear focus on body image. Specifically, the closest initiatives were mentioned by Aly who explained that there is some discussion of healthy diets and bodies in health class, and by Brie who said there is a girls' group offered to kids; however, the focus is not primarily on body image. Most of the teachers reported that they listen for children's talk to gain insight into their current feelings about their body image. Lena discussed that for her Grade 1 and 2 class:

They don't tend to talk about their bodies a lot. I don't hear the girls talking about each other's appearances, but the boys make fun of each other a lot and they tend to pick out physical things.

Seren agreed that she doesn't believe body image is a big issue in the children that she teaches; however, she has heard some fights related to weight or shape concerns in her Grade 2s, offering that she believes kids have learned that it is a taboo topic at this point.

They don't verbalize anything to me, but I can tell sometimes what they're thinking or where they hesitate or what some of the fights are about. Sometimes the girls fight because somebody said they were fat, but then boys aren't fighting about that, they're fighting about the ball or who had the stick or whatever. [The talk about body image is often] not out there because I think kids have learned that they're not supposed to talk about weight and some of that so, they try to hide it from me.

Seren made the important comment that it's possible that the kids hide information from her, as a teacher, about their feelings on weight and shape. In Trista's Grade 5 class, one student

was beginning to talk about her body image-related issues just prior to my interview with Trista, who wanted to talk about how she was feeling “fat”. Trista said that while she had a “one-on-one conversation” about “what is the range of normal”, the incident was quite isolated, meaning that the students don’t often talk to her about their weight or shape. Brie also talked about how she has recently heard some body image-related talk in her Grade 5 class, however, that it isn’t all that widespread.

One girl today said somebody called her a big fat hippo and so it’s her spirit name now, and it’s like, “that’s not a spirit name”, but she talks about that because she’s a little heavier and it bothers her. The girls more talk about emotional things, about awareness about their emotions and what they’re going through with that. Physical awareness they don’t necessarily really talk about it. Today was actually the first time it’s come up with the talking about being aware of other people’s physical characteristics and name calling about that. That was our first incident, but in general, the girls are more personal and they want to talk about their practicality or whatever, they will talk about it to me.

In the younger grades, such as Grade 2, teachers hear even less talk about weight or shape, since most of the participants in this study teaching this age range did not mention hearing anything at all. Charlotte, on the other hand, mentioned that she has heard some body image concerns in the past, however, that it is not prevalent at this point in time.

I haven’t seen it that much this year with the group that I’ve got. I have in past years, where again it’s the girls, you know, wearing little sweaters or covering up. I find that especially the girls this year, they’re pretty confident and you know, minus a couple boys who have that fixed mindset, they’re just, they’re just seven, eight-year-old kids.

Lena believed that the reason she did not hear any talk about weight or shape concerns is that the kids in Grade 1 and 2 don’t have the awareness yet to develop a negative body image. Rather, she felt that the students are “looking for attention” based on what they are doing, capability-wise. Julie also did not convey any concerns with body image with her younger students, agreeing that the students may not have that awareness at this point since “their maturity

is very young”, but that she sees a “switch when you’re in Grade 5 and Grade 6”. Josie, a relatively new teacher, talked about her surprise that she doesn’t hear much talk about body image because of her understanding of research reporting body image concerns in the elementary students she teaches. She tends to only see it in kids talking about adults’ physical looks, such as “you have pretty makeup today” or in picking stories with “pretty characters”. She explained:

I think they do probably [have body image issues], but I don’t hear them talk a lot about it in themselves. It’s more in other people that they would point out if someone were unattractive or attractive, like adults, I hear them point to one more like that. I’m sure they do, because we’re taught to know that [but], I just don’t actually hear them talk about it much.

Essentially, it appears that kids are beginning to talk about their body image in elementary school; however, teachers do not hear much body image concerns in their youngsters. While this could be a positive thing if there is a decline in low body esteem, it could also be negative if teachers are simply unaware of body image dissatisfaction. The teachers in this study did not report a specific body image focus for their mindfulness practice, but rather noted that they began the practice for two main reasons: focus and stress/anxiety reduction.

4.7. The Drawback Duo and the Benefit Bunch

The teachers using mindfulness within this study had very similar things to say about the initial reasons they chose to use mindfulness, its observable benefits, and its drawbacks. Specifically, they found that there were two main drawbacks to mindfulness practice. First, introducing mindfulness into the curriculum takes time both to plan, and time away from the standard material of the curriculum. Second, they found that some of the kids respond to mindfulness with scepticism to the new technique.

4.7.1. The drawback duo. Two drawbacks noted in the interviews were the most prominent: initial scepticism from kids and time spent away from the curriculum. However, not all of the teachers noted any drawbacks whatsoever. Trista talked about how her kids had the initial campy impression of mindfulness being “that you sit in a chair with your legs crossed and you put your hands up, basically like meditation, and you say ‘Om’”. Brie mentioned a few kids

in the class that were somewhat weary of the idea of mindfulness, since it might be somewhat embarrassing:

I would say some kids don't like some of the different strategies. They feel embarrassed to do them, but those are my cool hockey boys, they're like "I'm not doing this". Maybe they do it at home, who knows if they do or not, but they kind of have their guard up. Maybe their self-confidence isn't there enough to feel comfortable and to do it in front of everybody. They're growing, they're changing, "It's not cool for me to do this ". But when it's a quiet activity where I just have them close their eyes and put their head down and picture a beautiful place, a hot sunny day, their feet on the sand, something like that, they're right into that because they don't have to do anything but close their eyes.

Brie did make the note that when they were kept to their own devices, most of the kids were on board with trying the mindfulness strategies. Julie agreed, explaining that some students have may be sceptical at first, but they all usually tend to open up to the practice.

Some of them have a hard time, it's interesting to watch them, closing their eyes, there'll be looking around the room. Specifically more boys than girls don't buy into it as much. But, for the most part, in my classes I would have to say 80-85% of them will be doing what they're supposed to be doing, which is good, and eventually, if they're feeling that it's a safe environment, then the other ones will participate.

Charlotte had a particularly humorous take on how she battled some of the scepticism in her class, who wanted to see hard proof for how mindfulness works in the brain:

It's the brain piece that gets them to buy in. They're so very interested at the age of 6 and 7 to learn about the brain that they're at an immediate, "Oh yeah, I'm into this, I'm totally into this." I told them about a program when you're rigged up and it monitors your heart rate, and your brain waves that once you do your core practice, you can see the changes. I showed them a bit of that and then they were like, "Oh, okay, it does work." And so even

with the couple boys that were like “No, it doesn’t work for me”, once I showed them that, now they’re like “Oh, okay, it does work”.

Trista, Brie, Josie and Aly all mentioned that the one of the only drawbacks would be time away from curriculum and the use of their own time. Aly mentions that “time away from instruction, monitoring the children doing the program, and documenting the practice” is somewhat of a deterrent. However, Brie, Trista, and Josie all believe that the time spent away from curriculum to plan the programming is “totally worth it”. Brie explains that:

Something that would be more of a drawback only is that it takes away from curriculum, but at the same, without doing it, I’m progressing through curriculum, but they’re not absorbing it. So it’s kind of like a positive-negative together.

Therefore, despite the drawbacks, all of the teachers reported being able to overcome these difficulties through wearing down the children’s scepticism and in counting the time away from curriculum as time that helps the students become more productive overall.

4.7.2. The Benefit Bunch. Once again, the participants noted two main benefits to their mindfulness practice: calming and focus. Every teacher mentioned that their students developed a calmer demeanour and an increase in focus through their mindfulness practice in at least one capacity. It is important to note that perhaps these benefits were of the strongest focus, since all of the teachers also noted that they began using mindfulness for one of two reasons: to reduce negative/off-task behaviours in their classrooms, and to alleviate the growing amounts of anxiety that their youngsters have been facing.

Aly, Charlotte, Josie, Lena, Brie, Trista, and Seren all discussed being at a point in the school year where they noticed an upswing in off-task or disruptive behaviour in their classrooms when they decided to use mindfulness. Aly began using mindfulness to target specific children that needed extra help to “control their impulsivity and ability to maintain a calm composure when upset”. The other teachers used it on a wider basis to help the kids to maintain focus within the classroom environment. Brie noted that the kids were “blurting out, walking around, and there was so much impulsivity” that she decided to teach the kids about what is going on in their brains and to give them strategies to deal with it. Josie simply noted that when she needs to help

the kids' transition to a new task, she will "play a quick little video for about four minutes and then get back into our work".

All of the teachers commented on their mindfulness program's ability to help the kids to focus. Aly discussed that her students "have learned to focus their attention and to calm themselves with their morning relaxation time". Lena's art-based mindfulness practice has made gains in focus where other approaches have not been able to provide the children with the same type of benefits. Specifically, Lena mentioned, "some kids who really do not [focus well] in a class will hone in on art". Brie made the observation that the use of mindfulness has made a large impact in her class' ability to focus on the tasks at hand and has contributed to a more positive working environment as a whole.

The benefits that I observe would be that after we do something, a mindful activity, there's way more learning that takes place. They're on task, they're not fooling around, they're not blurting out in a lesson, whereas they used to just blurt out and not even have a clue what I'm talking about. [When they are supposed to look at] the front of the room they're actually focused and when I see that they're starting to elevate or escalate in a way that they're not going to be focused and they're losing their control, we just stop everything and do a mindful activity so that's the positivity. It changes that negative type of a classroom atmosphere to more positive on-task learning.

Julie talked about how drawing from the breath and breathing exercises helps to "energize" her students, which helps them to focus and "get ready to work". Seren made a note that the kids are more "cognizant of when they are hyper" and can tone themselves down. Trista made a wonderful metaphor to explain how mindfulness has helped her students to gain focus:

It helps them focus their brains, they're not [in] the monkey mind, and they're ready to start working.

Trista continued on to talk about the next big theme, in that she notices that kids are "much calmer, there is less anxiety about tests. Mindfulness helps to centre them," to ground

them. Charlotte talked about the necessity of forming a plan to help her kids with stress reduction, seeing as she has noticed a spike in anxiety as of recent times.

I've seen a change in our primary children in the past ten years that I've been teaching. The anxiety is growing, and stress is growing, and the fact that some of our boys and girls are dealing with traumas that they can't learn and because I started doing mindfulness practice myself at home, I started thinking, well, what is out there that I can start doing this with my kids? Because these kids are facing traumas and facing anxieties that I didn't have to deal with when I was growing up and they're not able to learn. Their little brains are hijacked and so what can we do as educators to help them learn, especially in primary? [In] primary, [if] their emotional and social needs are not being met, they're not learning. So a colleague of mine showed me the mindfulness program, or the MindUp curriculum that she got from a colleague of hers, and it just went from there.

In a nearly identical statement, Trista commented on how she found the anxiety levels in her classroom to be more extensive than she imagined for the age group that she teaches.

When I came into this building four years ago, I felt like my students, a lot of them were high achievers, but extremely anxious. Worried, stressed out about things that I wouldn't think ten, eleven year olds should be from my perspective. So I started reading four years ago, what can I do, what's in the research, and I talked to our teacher-librarian who brings in amazing materials. She brought in materials for me to read and that's when I approached the principal and said, "I'd like to try this".

When it came down to the results of implementing the programs, all of the teachers responded that they found a calmer, more relaxed and able classroom of students with using mindfulness strategies. Josie talked about how her mindfulness colouring proved to "not just fill time, but was really intentional" and "helped her students relax and totally calm down". She finds that by using mindfulness, the kids had a more positive frame of mind since they were more "mindful of the good things in their lives".

Charlotte noted that “there’s just not as much anxiety around completing schoolwork” and that parents “often will talk about how their child is so calm”, indicating the changes are widespread. Tying the calming benefits back into the discussion about Tools in the Tool Belt, she mentioned that “there is better self-regulation” and that the kids are now better able to use the techniques to help themselves to calm down. Julie provided us with a rationale for the calming benefits of mindfulness:

Some kids feel very vulnerable, like something might happen to them or happen in the room if their eyes are closed. I also think that some of them are thinking that their friends are watching them, so I think that’s a barrier. So we talk about that stuff to and just say “This is your time, it’s a safe place, this is your time to, there’s no expectations, you this is your safe place, this is time to breathe and, you don’t have to do any work, you just get to relax and be in the present.”

To end this section, Julie discussed the applicability of mindfulness in helping to calm down, to reduce anxiety, and overall in learning how to control their emotions through mindfulness. As mindfulness practice is a “safe place” with no expectations, it opens the kids up to accepting themselves, which could have a huge impact in terms of body image in the years to come.

They’re learning how to control their emotions. I also think the yoga brings in fitness, they don’t know that, but they’re learning how to strengthen their bodies. It’s their safe place where they can go, where they don’t have to worry about the media and all the social media. It’s your safe place, I guess it’s the place where you’re accepting yourself, right?

4.8. Summary

The experiences of teachers in Saskatchewan that are using mindfulness practices were explored in conjunction with their insights on the body esteem of the elementary students that they teach. Possible applications of mindfulness to alleviate any body image concerns were suggested in the semi-structured interview accounts by the teacher-participants. Different types of both formal and informal mindfulness practices were identified. Six major themes were identified

through their accounts: (1) The Minds of Mindfulness: MindUp, Tech-Minded, and the Creative Mind; (2) Tools in the Toolbox: Kids' Personal Use of the Language and Techniques of Mindfulness; (3) Capability and Confidence; (4) Differences and Diversity: How They Affect Body Image; (5) Teacher Talk: How Teachers Aren't Hearing About Body Image in Their Young Classes; and (6) The Drawback Duo and the Benefit Bunch. The following chapter explores this study's findings in relation to existing literature, the theoretical and practical implications of the findings; the strengths and limitations of the current study, and considerations for future research.

Chapter 5: Discussion

I took a thematic analysis approach to explore teachers' perspectives and to explore applications of mindfulness in the Saskatchewan curriculum through semi-structured interviews. This chapter summarizes the findings of this study, linking common themes with existing literature on the topic. The chapter concludes with a discussion of the strengths and limitations of the study, and practical and theoretical implications.

5.1. Summary of Findings

Eight elementary school teachers engaged in a semi-structured interview for this study, of which included two Grade 2 teachers, two Grade 5 teachers, one Grade 4 teacher, and three teachers that worked across Grades 1 through 4. The teachers used a wide variety of mindfulness practices in their classrooms, which ranged from creative practices like art, to structured curricula, such as the MindUp program. All of the teachers had a unique quality to their mindfulness practice, whether it was creatively using game play to enhance participation, or tying the mindfulness practice into the children's cultural and spiritual worldviews. Despite this wide array of practices, the participants shared similar stories of how they understand their students' body esteem to be in the early grades, the benefits and drawbacks to mindfulness practice, and the applicability of mindfulness to help alleviate body image concerns both now and in the future.

Data analysis of the interview transcripts using Hölzel et al.'s (2011) Four-Component Theoretical Model as a framework revealed six common themes: (1) The Minds of Mindfulness: MindUp, Tech-Minded, and the Creative Mind; (2) Tools in the Toolbox: Kids' Personal Use of the Language and Techniques of Mindfulness; (3) Capability and Confidence; (4) Differences

and Diversity: How They Affect Body Image; (5) Teacher Talk: How Teachers Aren't Hearing About Body Image in Their Young Classes; and (6) The Drawback Duo and the Benefit Bunch.

In the first theme, teachers shared the types of mindfulness practice that they used and I was particularly surprised to learn how widespread the MindUp program (The Hawn Foundation, 2011) was among Saskatchewan teachers, given the relative novelty of the curriculum. Participants believed that it offered a structured program to base their mindfulness program on, which added a backdrop to attach their creative iterations of mindfulness practice to. I also found that each teacher's unique definition of mindfulness influenced the type that they practiced, whether it was art or breathing exercises. The second theme explored teachers' perceptions in how mindfulness has made an impact on their students in terms of spontaneous use and adopting the language behind mindfulness practices, noting that their students respond positively to the practice and often use it on their own terms. The third and fourth themes linked students' body esteem not so much to weight or shape, but more so to what they are physically capable of doing with their bodies and to their perceived similarities or differences to the other students. Teachers offered mechanisms for how they have tailored their mindfulness practice to encompass cultural sensitivity and to foster a growth mindset, which communicates to the child that ability is something that can be earned, and is not necessarily set in stone. The fifth theme discusses how there are currently minimal interventions for helping children to improve on their body esteem in elementary grades and that despite knowledge that children must be facing these pressures, the teachers are not hearing it from their students. Finally, the sixth theme explores the common use of mindfulness to improve focus and reduce stress in their students and discusses the common drawbacks of time away from curriculum and initial child scepticism.

5.2. Integration of Results with Existing Literature

The findings of the current study were consistent with the existing literature on how teachers experience providing mindfulness services for their students and how it impacts the students' body esteem and beyond. The results of this research were moreover compatible with Hölzel et al.'s (2011) Four-Component Theoretical Model of Mindfulness. Three of the six themes were directly related to the four components of mindfulness that Hölzel and colleagues (2011) proposed are impacted by the use of mindfulness principles. These components work together to constitute a process of improved self-regulation.

First, mindfulness trains individuals to better their *Attention Regulation*, which is the first of the four components (Hölzel et al., 2011). Mindfulness does so by allowing the person practice with focusing their attention on what is desired and reducing the time spent focusing on distractions. This component is directly linked to the theme of *The Drawback Duo and the Benefit Bunch*, seeing as the teacher-participants in the study reported that most of them began their mindfulness programming in an effort to help their children to be able to better focus on the curriculum. The teachers reported that they found that their children were more focused learners following the program and were more self-aware of what might be impacting their success.

This theme is also connected to the second component of Hölzel et al.'s (2011) model: *Body Awareness*. The model's view on body awareness is that the participant in mindfulness becomes better able to notice subtle bodily sensations and sensory experiences (Mehling et al., 2009). This greater awareness of bodily sensations is linked to a more differentiated experience of bodily sensations and greater emotional awareness (Hölzel, Ott, Hempel, & Stark, 2006). As is particularly illustrated by Seren's account in the theme *Tools in the Toolbox: Kids' Personal Use of the Language and Techniques of Mindfulness*, the participants reported that their students were more aware of what they are feeling in their bodies, what might be acting as a barrier to their learning, and what they can do to remedy these barriers and achieve their goals. The body awareness component is also indirectly linked to the *Capability and Confidence* theme, since the participants noted that the children became more aware of what their bodies were physically capable of, which boosted their confidence.

The third component of Hölzel et al.'s (2011) model is *Emotion Regulation*, which includes the process of *reappraisal* and *exposure, extinction, and reconsolidation*. Reappraisal is defined in Hölzel et al.'s (2011) model as "the adaptive process through which stressful events are reconstrued as beneficial, meaningful, or benign" (Hölzel et al., 2011, p. 544). Exposure, extinction, and reconsolidation refers to the process with which mindfulness allows individuals to draw their attention to their bodily sensations and emotional experiences, but rather than being reactive to these experiences, facing them with observant acceptance (Hölzel et al., 2011). The model's mechanism through which both of these concepts are attained indicates that with regular meditation, two things occur. First, the individual tends to naturally gravitate towards more positive thoughts within meditation, which leads to reappraisal. Second, the individual learns to quietly observe negative thoughts as only passing by, which causes them to lose some of their

reactive value. Overall, the concept of *Emotion Regulation* is closely linked to the themes *Tools in the Toolbox* and *The Benefit Bunch*. In *Tools in the Toolbox*, teachers identified their children as being better able to use emotional language, to identify their emotions, and to address their emotions appropriately. In *The Benefit Bunch*, teachers noted that their students were calmer and had lost some of their reactivity to negative stimuli or thoughts, as is suggested by the process of *exposure, extinction, and reconsolidation*.

Finally, Hölzel et al.'s (2011) fourth component to their model is a *Change in Perspective on the Self*. Overall, the model suggests that regular mindfulness practice helps to provide greater clarity of one's thoughts, and in turn, one's self. The individual becomes an "observer" of their thoughts, which allows for greater acceptance of thoughts as they are, and greater acceptance of oneself overall (Hölzel, 2011). This is directly connected to our discussion of how mindfulness can impact a child's body image, or their conceptualization of their physical body and appearance. The theme *Capability and Confidence* indicates that the students of the participants in this study were able to develop a better sense of themselves and their bodies through observing their bodily ability (e.g., "Even though I'm not good at sports, I can do this yoga pose.") and by helping them to focus more broadly on their capabilities rather than their disabilities. The teacher-participants theorized that refocusing their students' thoughts in this manner could help to reduce negative ideas about their bodies in the future.

The accounts by the participants in this study provide illustrations of how Hölzel et al.'s (2011) four components of *Attention Regulation, Emotion Regulation, Body Acceptance, and Change in Perspective on the Self* are impacted through the use of mindfulness. This framework helped to provide a rationale to the participants' observations and added theoretical context to the thematic analysis of the current study.

5.2.1. Common benefits and autonomy: Focus, calmness, emotional awareness and capability. Although each teacher decided to incorporate mindfulness into their classrooms for a variety of reasons, they all agreed that they needed to try a new approach to dealing with off-task behaviours, loss of concentration, and the growing levels of anxiety among elementary students. The benefits reported by the teachers in turn were greater focus, concentration, and relatively calmer students. Qualitative studies using thematic analysis of the experiences of the teachers and children using mindfulness found that mindfulness practice often results in improvements in concentration and enhances feelings of mental focus on tasks and clarity in their thinking

following mindfulness sessions (Carelse, 2013; Smith, 2010; Smith, 2013). Children ranging from ages eight to fifteen experiencing mindfulness practice also reported having positive feelings toward mindfulness in terms of achieving calmness and reported feeling lower emotional reactivity, which is a measure of resilience (Ager, Albrecht, Cohen, 2015; Coholic, 2011; Cruchon, 2009; Smith, 2010; Smith 2013). Resilience is closely linked to fostering the growth mindset that the teachers in the current study discussed, which they inferred would help the children both now and in the future to develop more positive mindsets about their abilities. Coholic's (2011) findings that children using mindfulness have lower emotional reactivity particularly rings true with Charlotte's statement that the kids in her class that experienced trauma have experienced less emotional reactivity while using mindfulness as the program has progressed. Calmness has also been a widely reported theme in mindfulness programs with children including yoga, guided meditation, and structured programming such as the BREATHE program in children ranging from Grades 2 to 7 (Beets & Mitchell, 2010; Bluth, Roberson, & Gaylord, 2015; Liehr & Diaz, 2010; Mendelson et al., 2010; Metz et al., 2013)

Another commonality noted by the teachers was the kids' use of emotional language that they had never previously had, an enhanced ability to communicate their emotional needs, and greater self-acceptance of their emotions and abilities. Qualitative studies using interviews and journals from children also revealed that children participating in mindfulness programming also experienced heightened awareness of their physical sensations and emotions (Carelse, 2013; Smith, 2010; Smith, 2013). Structured formal programming such as the BREATHE program resulted in greater emotional regulation, tolerance, and less reactivity to stress triggers (Bluth, Roberson & Gaylord, 2015; Liehr & Diaz, 2010). As MindUp was often mentioned in the current study, studies examining the impacts of MindUp on elementary students also revealed greater levels of emotional and behaviour regulation, a reduction in stress, and overall improved self-regulation skills in academic and personal domains of children getting ready to enter school (Harpin, Rossi, Kim, & Swanson, 2016; Willis & Dinehart, 2013).

The literature taken together offers support to the themes of the benefits ("The Benefit Bunch and the Drawback Duo"), emotional language use and autonomous use of mindfulness strategies ("Tools in the Toolbox"), and of the use of some of the programming suggested by the teachers ("The Minds of Mindfulness").

5.2.2. Body image: The impact of capability and differences. Despite literature stating that children have negative perceptions of their bodies in terms of weight and shape at elementary age (Gaspar et al., 2011; Ling et al., 2015; Richards et al., 2015), the teachers did not mention much concern in their young students about the physical appearance of their bodies. Rather, they discussed issues emerging in body esteem based on both the capability of the body and their differences in terms of race or gender fluidity.

Frisen and Holmqvist (2010) noted that body dissatisfaction also comes from perceived capability of the body in children to early adolescents. In particular, they make the distinction that some children were not concerned about their appearance, but more so about what their body can do in terms of functionality. Morano, Colella, Robazza, Bortoli, and Capranica (2010) examined children in three categories of normal weight, overweight, and obese, and assessed each of these groups of children on their perceptions of strength, speed, and agility with track and field gym tasks. Their findings were congruent with the current study and that of Frisen and Holmqvist (2010), in saying that normal weight children tended to have self-perceptions of their body that were mediated by what they were able to do physically. However, they also noted that children who were the most overweight (the obese category) had relatively negative perceptions regardless of their ability. It is important to note that none of the teachers in the current study had many students that would be considered much more overweight than average. However, many of the teachers in the current study discussed how the physical aspects of mindfulness, such as yoga, influenced the children's perception of their physical capability. Congruent with this, Gaspar et al. (2011) discussed that when children engage in physical activity that they perceive they do well in, this physical activity acts as a protective factor in terms of body image.

Mentzel and Levine (2011) proposed an embodiment model of positive body image, in which certain activities and practices help the individual to develop a sense of their body's capability. In particular, dance, yoga, and sports were identified as being such activities that positively influence the participant's body image. Participating in more physical yoga-based activities as were mentioned in this study falls under the embodying activities category. For example, Brie mentioned that the children in her class that were not as skilled at physical activity were able to develop a sense of capability through yoga practice. Sandoz et al.'s (2013) body image flexibility mindset model of developing positive body image explains that if an individual has more flexibility in their thoughts about their body and if it doesn't impact their life in a large

sense, they are less likely to develop disordered eating symptoms and a negative body image. This idea is almost identical to the growth mindset mentioned by the participants in the current study, whereas children that develop flexibility in thought anecdotally report feeling more confident and are more equipped to deal with challenges in the future.

Fenton, Brooks, Spencer, and Morgan (2010) offered a different mediator to body image, but one that is also congruent with the current study. In the current study, the teacher participants noted that the importance of a growth mindset for fostering a more positive body image, not just in terms of what they can physically do with their bodies, but how capable they feel in their accomplishments and achieving their goals. The study by Fenton et al. (2010) also asserted that children's perceptions of their bodies are closely linked to their perceived ability on a number of domains, such as relationship building, and their ability to accomplish their goals.

Some of the teachers also mentioned that ideas of gender dissatisfaction and differences in terms of race were coming up in terms of curiosity of why these differences exist among younger students. These concerns may affect students' body esteem. Having gender dysphoria in younger childhood is linked to lower body esteem in children, due to the disconnectedness that children feel in their bodies. According to Steensma et al., (2013), children that have the lowest body esteem related to their gender are more likely to continue feeling this way through adolescence and adulthood. Lastly, there does appear to be a relatively small link between race/ethnicity and body dissatisfaction in children (Bucchianeri, Fernandes, Loth, Hannan, Eisenberg, & Neumark-Sztainer, 2016; van den Berg et al., 2010). However, our teachers in the current study are making excellent strides in helping to keep race/differences issues at bay by educating students on differences and helping them to understand why they should be proud of the skin that they're in.

5.3. Strengths and Limitations of Current Study

The teacher participant accounts that were explored through this study were immensely valuable and offered unique perspectives on possible applications to helping children to alleviate their body image concerns in the future. However, despite much of the current literature supporting the assertion that children are experiencing increasingly negative perceptions of their bodies (Dohnt & Tiggemann, 2006; Gaspar et al., 2011; Hayes et al., 2010; Hendy et al., 2001; Lawrie et al., 2007; Ling et al., 2015; Richards et al., 2015), the teachers in the current study did not indicate that they were aware of many body image issues in their young students, with only

minimal awareness of body image issues starting around Grade 5. A possible limitation to this study exists in the fact that only teachers' perspectives were explored without input from the children themselves. Unfortunately, teacher reports tend to have much discrepancy between children reports on measures of behaviour, anxiety, and self-esteem (Johnson & Hannon, 2014; Layne, Bernstein, & March, 2009). Therefore, some of the pieces that could have been identified solely by the children participating in the program may be missing. A second potential limitation is that likely the only teachers that responded to the call for participation were those that felt strongly about the value of the mindfulness curriculum. Therefore, we may have missed some of the perspectives of teachers that had difficulties with the mindfulness programming to offer potential strategies for improvement.

There are a few notable strengths of this study. First, the eight mindfulness-based teachers from schools in Saskatchewan had all mentioned off the record that their primary motivation for entering the study was to gain insight into how other teachers are using mindfulness in their elementary classrooms across the province to allow their own personal practices to grow. They were able to gain insight into their current practices through explaining their experiences using mindfulness and virtually all of them noted that they were able to think of their mindfulness practice in terms that they had never thought of before. As a student who will be working within a school setting, I found that I was able to gain a new perspective on the use of mindfulness in the classroom, and I have acquired a knowledge of many of the tools and approaches to mindfulness that have been helpful to alleviate stress, behaviour concerns, and to foster a more positive mindset for elementary children within Saskatchewan (e.g., MindUp, yoga riddles, picture books, GoNoodle, art). I would feel confident in recommending mindfulness as an intervention both within the classroom and on an individual basis.

Secondly, this study has added to the literature by providing insight into a new area. As mentioned, there were no studies that I was able to find that looked specifically at the experiences of teachers in utilizing mindfulness as a possible intervention to help curb the effects of a negative view of one's body within the elementary years. Indeed, there is a lack of body image initiatives in elementary students outside of mindfulness, with only a few studies noting programming to date (Meiklejohn et al., 2012; Zenner et al., 2014). Additionally, the focus on Saskatchewan teachers will have a specific applicability to educators within Western Canada, although it is undoubtedly applicable to all educators using mindfulness within their elementary

classrooms. Therefore, publishing the results of this study or presenting the results at conferences may prompt further research into the utility of mindfulness within the classroom.

Lastly, this study may impact future programming within schools if more research is conducted in this area. The preliminary findings from this current study indicate that teachers and parents alike have seen very positive changes within their children, and that while the mindfulness curriculum is beginning to spread within the Saskatchewan curriculum, it is possible that mindfulness training may be implemented as a widespread program among schools.

5.4. Implications for Practice

Although the call for participants was limited to educators within the Saskatchewan curriculum, the results of this study are applicable to all helping professionals within the school setting. The participants mentioned many of the more commonly known benefits of increasing focus and reducing stress and anxiety in their young elementary students, however, they provided concrete tools, such as the MindUp program and applications like GoNoodle, that educators, counsellors, psychologists, and social workers can draw from when implementing mindfulness into their programs. The participants also offered creative accounts for how they use mindfulness and how they use mindfulness to incorporate education about diversity and fostering an attitude of capability and growth. While the teachers did not mention the body image concerns in relation to weight and shape that were expected, the way that they utilize mindfulness in terms of fostering a more resilient, capability-focused attitude can have immeasurable benefits on reducing weight and shape concerns as they come up with elementary students and individuals that are older. Therefore, the support for mindfulness practice for this variety of benefits may influence the direction of programming and resources within schools both in Saskatchewan and on a wider scale.

5.5. Implications for Future Research

The implications of this study for future research are plenty due to the novelty of this topic, but with the relative boom of the use of mindfulness within the curriculum and within popular discourse. The first area that this study can impact is further research into the body image of elementary children and the initiatives that are presented for children at this young age. As mentioned, there are minimal studies within the literature that examine body image initiatives directed toward younger children (Meiklejohn et al., 2012; Zenner et al., 2014), despite literature

that claims that children are experiencing body image concerns in terms of weight and shape (Dohnt & Tiggemann, 2006; Gaspar et al., 2011; Hayes et al., 2010; Hendy et al., 2001; Lawrie et al., 2007; Ling et al., 2015; Richards et al., 2015) and in terms of capability, race, and differences, as is suggested by the current study (e.g., Bucchianeri et al., 2016; Frisen & Holmqvist, 2010; Steensma et al., 2013). Therefore, future studies exploring both educators' perspectives and additional perspectives, such as parents' and the children's, may be beneficial in determining the current impact of body image issues on elementary aged students.

A second area that this study may impact would be on the use of mindfulness within schools at all ages. Based on comments by the teacher participants, mindfulness is becoming much more widespread within the curriculum, however, it is still relatively understudied within the school curriculum. MindUp appears to be quite dominant within Saskatchewan, and there are currently relatively few studies examining the experiences of teachers utilizing this program within schools (Harpin, Rossi, Kim, & Swanson, 2016; Willis, & Dinehart, 2013). Further studies examining the utility, ease of administration of services, benefits and drawbacks of using mindfulness within the schools can influence future programming within the school system and on an individual child basis.

Lastly, a third area that may be explored is further studies on the use of mindfulness in terms of body image itself. There are very few studies looking at mindfulness in terms of body image of adolescents (Atkinson & Wade, 2015; Safer et al., 2007), and the current study is the only one known that looks at mindfulness in terms of body image in young (elementary aged) children. Therefore, future research would be beneficial to substantiate these findings and to explore different perspectives (i.e., additional educators, parents, and children) to provide depth to this new topic.

5.6. Conclusion

This thematic analytical study explored the experiences of educators using mindfulness in their classrooms and their perceptions on the utility of the practice for helping to alleviate the body image concerns of the children that they teach. The results of this study provided three important findings. First, teachers provided their unique iterations of mindfulness practice for elementary students and provided similar benefits in terms of increased focus and reduced anxiety with minimal drawbacks noted. Secondly, they highlighted the lack of initiatives and knowledge of body image related issues in elementary aged students. However, they mentioned

two areas in which body image may be impacted in elementary aged students: (1) their confidence in their physical and goal-oriented capability, and (2) their perceived differences. Lastly, they provided a mechanism with which to help students to overcome body image issues, among others, by fostering a “growth mindset,” which helps children to view themselves more positively through instilling the idea that their capability is flexible and can improve. Children are able to use the techniques and language that they have learned in their mindfulness practice within the classroom and are able to apply it independently to other situations as a tool to help them cope and succeed.

References

- Achenbach, T. M., & Edelbrock, C. (1991). Child behavior checklist. *Burlington (Vt)*, 7.
- Ackard, D.M., Fulkerson, J.A., Neumark-Sztainer, D. (2007). Prevalence and utility of DSM-IV eating disorder diagnostic criteria among youth. *International Journal of Eating Disorders*, 40, 409-417.
- Ager, K., Albercht, N.J., Cohen, M. (2015). Mindfulness in schools research project: Exploring students' perspectives of mindfulness – What are students' perspectives of learning mindfulness practices at school? *Psychology*, 6, 896-914.
- Altabe, M. & Thompson, J.K. (1996). Body image: A cognitive self-schema construct?., *Cognitive Therapy and Research*, 20(2), 171-193.
- American Psychological Association. (2002). Ethical principles of psychologists and code of conduct. *American Psychologist*, 57(12).
- Anderson, C. (2010). Presenting and evaluating qualitative research. *American journal of pharmaceutical education*, 74(8), 141.
- Ando, H., Cousins, R., & Young, C. (2014). Achieving saturation in thematic analysis: Development and refinement of a codebook 1, 2, 3. *Comprehensive Psychology*, 3, 03-CP.
- AnxietyBC. (2016). Accessed from: <https://www.anxietybc.com/resources/mindshift-app>.
- Asher, H.B. (1984). *Theory-Building and Data Analysis in the Social Sciences*. Knoxville, TN: University of Tennessee Press.
- Atieno, O. P. (2009). An analysis of the strengths and limitation of qualitative and quantitative research paradigms. *Problems of Education in the 21st Century*, 13(1), 13-38.
- Atkinson, M.J., & Wade, T.D. (2015). Mindfulness-based prevention for eating disorders: A school-based cluster randomized controlled study. *International Journal of Eating Disorders*, DOI: 10.1002/eat.22416.
- Avalos, L., & Tylka, T. (2006). Exploring a model of intuitive eating with college women. *Journal of Counseling Psychology*, 53, 486–497. doi:10.1037/0022-0167.53.4.486.
- Avalos, L., Tylka, T., & Wood-Barcalow, N. (2005). The Body Appreciation Scale development and psychometric evaluation. *Body Image*, 2, 285–297. doi:10.1016/j.bodyim.2005.06.002.

- Baruth, K. E., & Carroll, J. J. (2002). A formal assessment of resilience: The Baruth Protective Factors Inventory. *The Journal of Individual Psychology*.
- Baumeister, R.F. (Ed.) (1999). *The self in social psychology*. Philadelphia, PA: Psychology Press (Taylor & Francis).
- Beets, M. W., & Mitchell, E. (2010). Effects of yoga on stress, depression, and health-related quality of life in a non-clinical, bi-ethnic sample of adolescents: A pilot study. *Hispanic Health Care International*, 8, 47–53.
- Birnie, K., Speca, M., & Carlson, L. E. (2010). Exploring self--compassion and empathy in the context of mindfulness--based stress reduction (MBSR). *Stress and Health*, 26(5), 359–371.
- Bishop, S.R., Lau, M., Shapiro, S., Carlson, L., Anderson, N.D., Carmody, J., & Devins, G. (2004). Mindfulness: A proposed operational definition. *Clinical Psychology: Science and Practice*, 11, 230-241.
- Black, D.S. & Fernando, R. (2014). Mindfulness training and classroom behavior among lower-income and ethnic minority elementary school children. *Journal of Child & Family Studies*, 23, 1242-1246.
- Black, D. S., Milam, J., & Sussman, S. (2008). Sitting-meditation interventions among youth: A review of treatment efficacy. *Pediatrics*, 124, 532–541.
- Blease, C.R. (2015). Too many ‘friends’, too few ‘likes’? Evolutionary psychology and ‘Facebook depression’. *Review of General Psychology*, 19(1), 1.
- Bluth, K., Roberson, P.N.E., & Gaylord, S.A. (2015). A pilot study of a mindfulness intervention for adolescents and the potential role of self-compassion in reducing stress. *Explore*, 11, 292-295.
- Bohn, K., & Fairburn, C. G. (2008). The clinical impairment assessment questionnaire (CIA). *Cognitive behavioral therapy for eating disorders*.
- Boudette, R. (2006). Question & answer: Yoga in the treatment of disordered eating and body image disturbance: How can the practice of yoga be helpful in recovery from an eating disorder?.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3, 77-101.

- Brixval, C.S., Rayce, S.L.B., Rasumussen, M., Holstein, B., & Due, P. (2011). Overweight, body image and bullying – an epidemiological study of 11- to 15-years olds. *European Journal of Public Health*, 22(1), 126-120.
- Broderick, P. C., & Metz, S. (2009). Learning to BREATHE: A pilot trial of a mindfulness curriculum for adolescents. *Advances in School Mental Health Promotion*, 2, 35–46.
- Brown, C. (2015). Textual erasures of religion: The power of books to redefine yoga and mindfulness meditation as secular wellness practices in North American public schools. *Mémoires du livre*, 6(2).
- Brown, K.W., Ryan, R.M., & Creswell, J.D. (2007). Mindfulness: Theoretical foundations and evidence for its salutary effects. *Psychological Inquiry*, 18(4), 211-237.
- Brown, T. A., Cash, T. F., & Mikulka, P. J. (1990). Attitudinal body- image assessment: Factor analysis of the Body-Self Relations Questionnaire. *Journal of Personality Assessment*, 55, 135–144. doi:[10.1080/00223891.1990.9674053](https://doi.org/10.1080/00223891.1990.9674053).
- Bucchianeri, M. M., Fernandes, N., Loth, K., Hannan, P. J., Eisenberg, M. E., & Neumark-Sztainer, D. (2016). Body dissatisfaction: Do associations with disordered eating and psychological well-being differ across race/ethnicity in adolescent girls and boys?. *Cultural Diversity and Ethnic Minority Psychology*, 22(1), 137.
- Burke, C. A. (2010). Mindfulness-based approaches with children and adolescents: A preliminary review of current research in an emergent field. *Journal of Child and Family Studies*, 19(2), 133-144.
- Cahn, B.R., & Polich, J. (2006). Meditation states and traits: EEG, ERP, and neuroimaging studies. *Psychological Bulletin*, 132(2), 180.
- Carelse, B. (2013). *Children's Experiences of Learning Mindfulness to Help Develop Their Attentional Skills*. PhD Thesis, University of East London, London.
- Carlson, L. E., & Brown, K. W. (2005). Validation of the Mindful Attention Awareness Scale in a cancer population. *Journal of psychosomatic research*, 58(1), 29-33.
- Carver, C.S. & Scheier, M.F. (2011). *Self-regulation of action and affect*. In Vohs K.D., Baumeister R.F. (Eds.), *Handbook of self-regulation* (pp. 3-21). New York, NY: Guilford.
- Chambers, R., Lo, B. C. Y., & Allen, N. B. (2008). The impact of intensive mindfulness training on attentional control, cognitive style, and affect. *Cognitive therapy and research*, 32(3), 303-322.

- Chan, S. & Debono, M. (2010). Replication of cortisol circadian rhythm: new advances in hydrocortisone replacement therapy. *Therapeutic Advances in Endocrinology and Metabolism*, 1(3), 129-138.
- Charmaz, K., Denzin, N. K., & Lincoln, Y. S. (2003). Strategies of qualitative inquiry. *Grounded theory: Objectivist and constructivist methods*, 249-291.
- Chen, Y.C., Benus, M.J., & Yarker, M.B. (2016). Using models to support argumentation in the science classroom. *The American Biology Teacher*, 78(7), 549-559.
- Cherry, K. (2016). *What is self-esteem?*. Retrieved from <https://www.verywell.com/what-is-self-esteem-2795868>
- Chiesa, A., & Serretti, A. (2010). A systematic review of neurobiological and clinical features of mindfulness meditations. *Psychological Medicine*, 40(08), 1239–1252.
- Christopher, J.C., Christopher, S.E., Dunnagan, T., & Schure, M. (2006). Teaching self-care through mindfulness practices: The application of yoga, meditation, and Qigong to counselor training. *Journal of Humanistic Psychology*, 46(4), 494-509.
- Cohen, S., Kamarck, T., & Mermelstein, R. (1994). Perceived stress scale. *Measuring stress: A guide for health and social scientists*.
- Coholic, D. A. (2011). Exploring the Feasibility and Benefits of Arts-Based Mindfulness-Based Practices with Young People in Need: Aiming to Improve Aspects of Self-Awareness and Resilience. *Child Youth Care Forum*, 40, 303-317. <http://dx.doi.org/10.1007/s10566-010-9139-x>
- Condon, P., Desbordes, G., Miller, W. B., & DeSteno, D. (2013). Meditation increases compassionate responses to suffering. *Psychological Science*, 24(10), 2125–2127.
- Conrad, C. F., & Serlin, R. C. (2011). *The Sage handbook for research in education: Pursuing ideas as the keystone of exemplary inquiry*. Sage.
- Cramer, H., Ward, L., Steel, A., Lauche, R., Dobos, G., & Zhang, Y. (2016). Prevalence, patterns, and predictors of yoga use: Results of a U.S. Nationally representative survey. *American Journal of Preventive Medicine*, 50(2), 230-235.
- Creswell, J.W. (2007). *Qualitative inquiry and research design: Choosing among !ve approaches* (2nd ed.). Thousand Oaks, CA: Sage.
- Creswell, J.W. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (4th ed.). Upper Saddle River, NJ: Pearson Education.

- Creswell, J.W. and Miller, D.L. (2000). Determining validity in qualitative inquiry. *Theory into Practice*, 39, (3), 124-130.
- Cruchon, M. (2009). *The Benefits of Integrating Mindfulness and Yoga in the Elementary Classroom*. Master's Thesis.
<http://www.spectrum.library.concordia.ca/976621/1/MR63087.pdf>
- Currie, C. E., Elton, R. A., Todd, J., & Platt, S. (1997). Indicators of socioeconomic status for adolescents: the WHO Health Behaviour in School-aged Children Survey. *Health education research*, 12(3), 385-397.
- De Vignemont, F. (2010). Body schema and body image – Pros and cons. *Neuropsychologia*, 48(3), 669-680.
- Dohnt, H.K. & Tiggemann, M. (2006). Body image concerns in young girls: The role of peers and media prior to adolescence. *Journal of Youth and Adolescence*, 35, 135.
- Efklides, A. (2008). Metacognition: Defining its facets and levels of functioning in relation to self-regulation and co-regulation. *European Psychologist*, 13(4), 277-287.
- Fairburn, C.G. (2008). *Cognitive behavior therapy and eating disorders*. The Guilford Press: New York, NY.
- Fenton, C., Brooks, F., Spencer, N. H., & Morgan, A. (2010). Sustaining a positive body image in adolescence: an assets-based analysis. *Health & social care in the community*, 18(2), 189-198.
- Flook, L., Goldberg, S. B., Pinger, L., Bonus, K., & Davidson, R. J. (2013). Mindfulness for teachers: A pilot study to assess effects on stress, burnout, and teaching efficacy. *Mind, Brain, and Education*, 7(3), 182–195.
- Flook, L., Smalley, S.L., Kitil, M.J., Galla, B.M., Kaiser-Greenland, S., Locke, J., Ishijima, E., & Kassari, C. (2010). Effects of mindful awareness practices on executive functions in elementary school children. *Journal of Applied School Psychology*, 26(1), 70-95.
- Franzoi, S.L., & Shields, S.A. (1984). The Body-Esteem Scale: Multidimensional structure and sex differences in a college population. *Journal of Personality Assessment*, 48, 173-178.
- Frisen, A. & Holmqvist, K. (2010). (2010). What characterizes early adolescents with a positive body image? A qualitative investigation of Swedish girls and boys. *Body Image*, 7, 205-212.

- Frondsals, G. (2006). *The Dhammapada: A new translation of the Buddhist classic with annotations*. Shambhala Publications.
- Fylan, F. (2005). Semi structured interviewing. *A handbook of research methods for clinical and health psychology*, 65-78.
- Gall, M. D., Gall, J. P., & Borg, W. R. (2007). Collecting research data with questionnaires and interviews. *Educational research: An introduction*, 227-261.
- Gallagher, S. (1986). Body image and body schema: A conceptual clarification. *The Journal of Mind and Behavior*, 541-554.
- Garnefski, N., & Kraaij, V. (2007). The cognitive emotion regulation questionnaire. *European Journal of Psychological Assessment*, 23(3), 141-149.
- Gaspar, M.J., Amaral, T.F., Oliveira, B.M.P.M., & Borges, N., (2011). Protective effect of physical activity on dissatisfaction with body image in children – A cross-sectional study. *Psychology of Sport and Exercise*, 12(5), 563-569.
- Golafshani, N. (2003). Understanding Reliability and Validity in Qualitative Research. *The Qualitative Report*, 8(4), 597-606. Retrieved from <http://nsuworks.nova.edu/tqr/vol8/iss4/6>
- Gould, L. F., Dariotis, J. K., Mendelson, T., & Greenberg, M. (2012). A school-based mindfulness intervention for urban youth: Exploring moderators of intervention effects. *Journal of Community Psychology*, 40(8), 968-982.
- Grabovac, A.D., Lau, M.A., & Willett, B.R. (2011). Mechanisms of mindfulness: A Buddhist psychological model. *Mindfulness*, 2(3), 154-166.
- Greco, L. A., Baer, R. A., & Smith, G. T. (2011). Assessing mindfulness in children and adolescents: development and validation of the Child and Adolescent Mindfulness Measure (CAMM). *Psychological assessment*, 23(3), 606.
- Greenberg, M. T., & Harris, A. R. (2012). Nurturing mindfulness in children and youth: Current state of research. *Child Development Perspectives*, 6(2), 161-166.
- Grogan, S. (2008). Body image in *Understanding body dissatisfaction in men, women, and children*. (pp. 3). New York, NY: Routledge.
- Gu, J., Strauss, C., Bond, R., & Cavanagh, K. (2015). How do mindfulness-based cognitive therapy and mindfulness-based stress reduction improve mental health and wellbeing? A systematic review and meta-analysis of meditation studies. *Clinical Psychology Review*,

37, 1-12.

- Guest, G., MacQueen, N., & Namey, E. E. (2012). Introduction to thematic analysis. *Applied thematic analysis*, 12.
- Halliwel, E. (2015). Future directions for positive body image research. *Body image*, 14, 177-189.
- Hanley, A., Warner, W., Dehili, A., Canto, R., & Garland, V. (2014). Washing Dishes to Wash the Dishes: Brief Instruction in an Informal Mindfulness Practice. *Mindfulness*, 6(5), 1095-1103.
- Harpin, S.B., Rossi, A., Kim, A.K., & Swanson, L.M. (2016). Behavioral impacts of a mindfulness pilot intervention for elementary school students. *Education*, 137(2), 149.
- Harriger, J. A., & Thompson, J. K. (2012). Psychological consequences of obesity: Weight bias and body image in overweight and obese youth. *International Review of Psychiatry*, 24(3), 247-253.
- Hayes, S.C., & Shenk, C. (2004). Operationalizing mindfulness without unnecessary attachments. *Clinical Psychology: Science and Practice*, 11, 249-254.
- Hayes, S. & Tantleff-Dunn, S. (2010). Am I too fat to be a princess? Examining the effects of popular children's media on young girls' body image. *British Journal of Developmental Psychology*, 28(2), 413-426.
- Hendy, H.M., Gustitus, C., & Leitzel-Schwalm, J. (2001). Socieal cognitive predictors of body image in preschool children. *Sex Roles*, 44(9), 557-569.
- Heron, K.E., Smyth, J.M., Akano, E., & Wonderlich, S.A. (2013). Assessing body image in young children: A preliminary study of racial and developmental differences. *SAGE Open*, January-March 2013, 1-7.
- Hilbert, A., Tuschen-Caffier, B., Karwautz, A., Niederhofer, H., & Munsch, S. (2007). Eating disorder examination-questionnaire. *Diagnostica*, 53(3), 144-154.
- Hindman, R.K., Glass, C.R., Arnkoff, D.B., & Maron, D.D. (2015). A Comparison of Formal and Informal Mindfulness Programs for Stress Reduction in University Students. *Mindfulness*, 6(4), 873-884.
- Hölzel, B. K., Carmody, J., Evans, K. C., Hoge, E. A., Dusek, J. A., Morgan, L., ... Lazar, S. W. (2010). Stress reduction correlates with structural changes in the amygdala. *Social Cognitive and Affective Neuroscience*, 5(1), 11-17.

- Hölzel, B. K., Carmody, J., Vangel, M., Congleton, C., Yerramsetti, S. M., Gard, T., & Lazar, S. W. (2011). Mindfulness practice leads to increases in regional brain gray matter density. *Psychiatry Research: Neuroimaging*, 191(1), 36–43.
- Hölzel, B. K., Ott, U., Hempel, H., & Stark, R. (2006). Wie wirkt Achtsamkeit? Eine Interviewstudie mit erfahrenen Meditierenden (How does mindfulness work? An interview study with experienced meditators). In *24th Symposium of the Section for Clinical Psychology and Psychotherapy of the German Society for Psychology, Würzburg, Germany*.
- Huppert, F.A. & Johnson, D.M. (2010). A controlled trial of mindfulness training in schools: the importance of practice for an impact on well-being. *Journal of Positive Psychology*, 5(4), 264-274.
- Iyengar, B. K. S. (2007). *BKS Iyengar yoga: The path to holistic health*. Penguin.
- Jankowski, T., & Holas, P. (2014). Metacognitive model of mindfulness. *Consciousness and Cognition*, 28, 64-80.
- Jelenchick, L.A., Eickhoff, J.C., & Moreno, M.A. (2013). “Facebook depression?” Social networking site use and depression in older adolescents. *Journal of Adolescent Health*, 52(1), 128-130.
- Jennings, P. A., Brown, J. L., Frank, J. L., Doyle, S. L., Tanler, R., Rasheed, D., DeWeese, A., DeMauro, A., & Greenberg, M. T. (2015). Promoting teachers’ social and emotional competence, well-being and classroom quality: a randomized controlled trial of the CARE for Teachers Professional Development Program. In C. Bradshaw (Ed.), *Examining the impact of school-based prevention programs on teachers: findings from three randomized trials*. Washington D.C: Symposium presented at the Society for Prevention Research Annual Meeting. (Submitted for Initial Review).
- Jennings, P. A., Frank, J. L., Snowberg, K. E., Coccia, M. A., & Greenberg, M. T. (2013). Improving Classroom Learning Environments by Cultivating Awareness and Resilience in Education (CARE): Results of a Randomized Controlled Trial. *School Psychology Quarterly*, 28(4), 374–390.
- Jha, A. P., Stanley, E. A., Kiyonaga, A., Wong, L., & Gelfand, L. (2010). Examining the protective effects of mindfulness training on working memory capacity and affective experience. *Emotion*, 10(1), 54.

- Johnson, B., & Christensen, L. (2008). *Educational research: Quantitative, qualitative, and mixed approaches*. Sage.
- Johnson, K., & Hannon, M. (2014). Measuring the relationship between parent, teacher, and student problem behavior reports and academic achievement: Implications for school counselors. *Professional School Counseling, 18*(1), 38-48.
- Kabat-Zinn, J. (1994). *Wherever you go, there you are: Mindfulness meditation in everyday life*. New York: Hyperion.
- Kabat-Zinn, J. (2003). Mindfulness-based interventions in context: Past, present, and future. *Clinical Psychology: Science and Practice, 10*(2), 144-156.
- Kater, K.J. Rohwer, J., & Levine, M.P. (2007). An elementary school project for developing healthy body image and reducing risk factors for unhealthy and disordered eating. *Eating Disorders, 8*(1), 3-16.
- Kerr, C.E., Sacchet, M.D., Lazar, S.W., Moore, C.I., & Jones, S.R. (2013). Mindfulness starts with the body: Somatosensory attention and top-down modulation of cortical alpha rhythms in mindfulness meditation. *Frontiers in Human Neuroscience*. Available at <http://journal.frontiersin.org/Journal/10.3389/fnhum.2013.00012/full>.
- Kilbourne, J.R., Scott-Webber, L., & Kapitula, L.R. (2017). An activity-permissible classroom: Impacts of an evidence-based design solution on student engagement and movement in an elementary-school classroom. *Children, Youth, and Environments, 27*(1), 112-134.
- Koch, T. (2006). Establishing rigour in Qualitative Research: the decision trail. *Journal of Advanced Nursing, 53*, (1), 91-103.
- Kristeller, J. L., & Wolever, R. Q. (2010). Mindfulness-based eating awareness training for treating binge eating disorder: the conceptual foundation. *Eating disorders, 19*(1), 49-61.
- Lau, N. & Hue, M. (2011). Preliminary outcomes of a mindfulness-based programme for Hong Kong adolescents in schools: well-being, stress and depressive symptoms. *International Journal of Children's Spirituality, 16*(4), 315-330.
- Lawrie, Z., Sullivan, E.A., Davies, P.S.W., & Hill, R.J. (2007). Media influence on the body image of children and adolescents. *Eating Disorders: The Journal of Treatment & Prevention, 14*(5), 355-364.
- Layne, A.E., Bernstein, G.A., & March, J.S. (2009). Teacher awareness of anxiety symptoms in children. *Child Psychiatry & Human Development, 36*(4), 383-392.

- Liehr, P., & Diaz, N. (2010). A Pilot Study Examining the Effect of Mindfulness on Depression and Anxiety for Minority Children. *Archives of Psychiatric Nursing*, 24(1), 69–71.
- Lincoln, Y.S. and Guba, E.G. (1985). *Naturalistic Inquiry*. Sage Publications, Newbury Park.
- Ling, F.C.M., McManus, A.M., Knowles, G., Masters, R.S.W., & Polman, R.C.J. (2015). Do children emotionally rehearse about their body image? *Journal of Health Psychology*, 20(9), 1133-1141.
- Lindsay, E.K., & Creswell, J.D. (2017). Mechanisms of mindfulness training: Monitor and Acceptance Theory (MAT). *Clinical Psychology Review*, 51, 48-59.
- Liss, M., Erchull, M., & Ramsey, L. (2011). Empowering or oppressing? Development and exploration of the Enjoyment of Sexualisation Scale. *Personality and Social Psychology Bulletin*, 37, 55–68. doi: [10.1177/0146167210386119](https://doi.org/10.1177/0146167210386119).
- Lovallo, W.R., Farag, N.H., Vincent, A.S., Thomas, T.L., & Wilson, M.F. (2008). Corticol responses to mental stress, exercise, and meals following caffeine intake in men and women. *Pharmacol Biochem Behav*, 83(3), 441-447.
- Lovibond, S.H. & Lovibond, P.F. (1995). Manual for the Depression Anxiety Stress Scales. *Psychology Foundation*, Sydney.
- Luskin-Biordi, D. & McCann-Galon, P. (2011). Body Image in I.M. Lubkin and P.D. Larsen (Eds.), *Chronic illness: Impact and intervention* (pp. 133-150). Burlington, MA: Larsen, Jones & Bartlett Learning.
- Lutz, A., Slagter, H.A., Dunne, J.D., & Davidson, R.J. (2008). Attention regulation and monitoring in meditation. *Trends in Cognitive Sciences*, 12(4), 163-169.
- Mahlo, L. & Tiggemann, M. (2016). Yoga and positive body image: A test of the Embodiment Model. *Body Image*, 18, 135-142.
- March, J. S., Parker, J. D., Sullivan, K., Stallings, P., & Conners, C. K. (1997). The Multidimensional Anxiety Scale for Children (MASC): factor structure, reliability, and validity. *Journal of the American academy of child & adolescent psychiatry*, 36(4), 554-565.
- Martin, J.J. & Cutler, K. (2002). An exploratory study of flow and motivation in theatre actors. *Journal of Applied Sport Psychology*, 14, 344-352.
- Maslow, A.H. (1987). *Motivation and personality* (3rd ed.). New York: Harper & Row.

- McCorkle, R.U.T.H., & Young, K. (1978). Development of a symptom distress scale. *Cancer Nursing*, 1(5), 373-378.
- McLeod, S.A. (2008). *Self Concept*. Retrieved from www.simplypsychology.org/self-concept.html
- McKinley, N. M., & Hyde, J. S. (1996). The objectified body consciousness scale: Development and validation. *Psychology of Women Quarterly*, 20, 181–215. doi:10.1111/j.1471-6402.1996.tb00467.x.
- Mehling, W.E., Gopisetty, V., Daubenmier, J., Price, C.J., Hecht, F.M., Stewart, A. (2009). Body awareness: Construct and self-report measures. *PLoS ONE*, 4, e5614. Crossref, Medline.
- Meichenbaum, D. (1977). Cognitive behaviour modification. *Scandinavian Journal of Behaviour Therapy*, 6(4), 185-192.
- Meier, E.P., & Gray, J. (2014). Facebook photo activity associated with body image disturbance in adolescent girls. *Cyberpsychology, Behavior, and Social Networking*, 14(4), 199-206.
- Meiklejohn, J., Phillips, C., Freedman, M.L., Griffin, M.L., Biegel, G., Roach, A., Frank, J., Burke, C., Pinger, L., Soloway, G., Isberg, R., Sibinga, E., Grossman, L., & Saltzman, A. (2012). Integrating mindfulness training into K-12 education: Fostering the resilience of teachers and students. *Mindfulness*, 3(4), 291-307.
- Mendelson, T., Greenberg, M. T., Dariotis, J. K., Gould, L. F., Rhoades, B. L., & Leaf, P. J. (2010). Feasibility and preliminary outcomes of a school-based mindfulness intervention for urban youth. *Journal of Abnormal Child Psychology*, 38, 985–994.
- Mendelson, B.K., Mendelson, M.J., & White, D.R. (2001). Body-esteem scale for adolescents and adults. *Journal of Personal Assessment*, 76(1), 90-106.
- Mentzel, J.E. (2010). The psychometric validation of the physical body experiences questionnaire. Retrieved from Scholar Commons Graduate Theses and Dissertations, <http://scholarcommons.usf.edu/etd/1710>
- Menzel, J. E., & Levine, M. P. (2011). Embodying experiences and the promotion of positive body image: The example of competitive athletics. In R. M. Calogero, S. Tantleff-Dunn, & J. K. Thompson (Eds.), *Self-objectification in women: Causes, consequences, and counteractions* (pp. 163–186). Washington DC: American Psychological Association.
- Merriam, S.B. (1998). *Qualitative research and case study applications in education*. San Francisco: Jossey-Bass.

- Merriam, S. B. (2009). *Qualitative research: A guide to design and implementation: Revised and expanded from qualitative research and case study applications in education*. San Francisco: Jossey-Bass.
- Metz, S. M., Frank, J. L., Reibel, D., Cantrell, T., Sanders, R., & Broderick, P. C. (2013). The effectiveness of the learning to BREATHE program on adolescent emotion regulation. *Research in Human Development, 10*(3), 252–272.
- Miksch, D., Lindeman, M.I.H., & Varghese, L. (2015). Minding the mechanisms: A discussion of how mindfulness leads to positive outcomes at work, *Industrial and Organizational Psychology, 8*(4), 620-629.
- Mizes, J., Christiano, B., Madison, J., Post, G., Seime, R., & Varnado, P. (2000). Development of the Mizes Anorectic Cognitions Questionnaire-Revised: Psychometric properties and factor structure in a large sample of eating disorder patients. *International Journal of Eating Disorders, 38*(4), 415-421.
- Moore, A., & Malinowski, P. (2009). Meditation, mindfulness and cognitive flexibility. *Consciousness and cognition, 18*(1), 176-186.
- Morano, M., Colella, D., Robazza, C., Bortoli, L., Capranica, L. (2010). Physical self-perception and motor performance in normal-weight, overweight, and obese children. *Scandinavian Journal of Medicine & Science in Sports, 21*(3), 465-473.
- Napoli, M., Krech, P.R., & Holley, L.C. (2005). Mindfulness training for elementary school students. *Journal of Applied School Psychology, 21*(1), 99-125.
- Neagu, A. (2015). Body image: A theoretical framework. *Proceedings of the Romanian Academy, 17*(1), 29-38.
- Neff, K. D., & Germer, C. K. (2013). A Pilot Study and Randomized Controlled Trial of the Mindful Self--Compassion Program. *Journal of Clinical Psychology, 69*(1), 28–44.
- Nicholls, D. E., Lynn, R., & Viner, R.M. (2011). Childhood eating disorders: British national surveillance study. *The British Journal of Psychiatry, 198*(4), 295-301.
- O'Dea, J., & Maloney, D. (2000). Preventing eating and body image problems in children and adolescents using the healthy promoting schools framework. *Journal of School Health, 70* (1), 18.
- O'Keeffe, G. S., & Clarke-Pearson, K. (2011). The impact of social media on children, adolescents, and families. *Pediatrics, 127*(4), 800-804.

- Olendzki, A. (2010). *Unlimiting mind: The radically experiential psychology of Buddhism*. Simon and Schuster.
- Ortner, C. N., Kilner, S. J., & Zelazo, P. D. (2007). Mindfulness meditation and reduced emotional interference on a cognitive task. *Motivation and Emotion*, 31(4), 271–283.
- Paraskeva, N., Lewis-Smith, H., & Diedrichs, P.C. (2017). Consumer opinion on social policy approaches to promoting positive body image: Airbrushed media images and disclaimer labels. *Journal of Health Psychology*, 22(2), 164-175.
- Patton, M.Q. (2002). *Qualitative research and evaluation methods* (3rd Ed.) Thousand Oaks, CA: Sage.
- Piaget, J. (1964). Part I: Cognitive development in children: Piaget development and learning. *Journal of research in science teaching*, 2(3), 176-186.
- Pitney, W. A. (2004). Strategies for establishing trustworthiness in qualitative research. *Athletic Therapy Today*, 9(1), 26-28.
- Ponterotto, J. G. (2002). Qualitative research methods: The fifth force in psychology. *The Counseling Psychologist*, 30(3), 394-406.
- Proulx, K. (2006). Experiences of women with bulimia nervosa in a mindfulness-based eating disorder treatment group. *Eating Disorders*, 16(1), 52-72.
- Raes, F., Griffith, J. W., Van der Gucht, K., & Williams, J. M. G. (2014). School--based prevention and reduction of depression in adolescents: A cluster--randomized controlled trial of a mindfulness group program. *Mindfulness*, 5(5), 477–486.
- Reulbach, U., Ladewig, E.L., Nixon, E., O'Moore, M., Williams, J., & O'Dowd, T. (2013). Weight, body image and bullying in 9-year-old children. *Journal of Paediatrics and Child Health*, 49(4), 288-293.
- Rhys Davids, T.W. (1881). *Buddhist Suttas* (pp. 145). Oxford, UK: Clarendon Press.
- Richards, D., Caldwell, P.H.Y., & Go, H. (2015). Impact of social media on the health of children and young people. *Journal of Paediatrics and Child Health*, 51(12), 1152-1157.
- Roberts, R.E., & Vernon, S.W. (1983). The Center for Epidemiological Studies Depression Scale: Its use in a community sample. *The American Journal of Psychiatry*.
- Roeser, R.W., Skinner, E., Beers, J., & Jennings, P.A. (2012). Mindfulness training and teachers' professional development: An emerging area of research and practice. *Child Development Perspectives*, 6(2), 167-173.

- Rogers, C. R. (1959). *A theory of therapy, personality, and interpersonal relationships: As developed in the client-centered framework* (Vol. 3, pp. 184-256). New York: McGraw-Hill.
- Rogers, M.R. (2000). Examining the cultural context of consultation. *School Psychology Review*, 29(3), 414.
- Ryff, C. D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of personality and social psychology*, 57(6), 1069.
- Safer, D. L., Couturier, J. L., & Lock, J. (2007). Dialectical behavior therapy modified for adolescent binge eating disorder: A case report. *Cognitive and behavioral practice*, 14(2), 157-167.
- Sales, B.D., & Folkman, S. (Eds.). (2000). *Ethics in research with human participants*. Washington, DC: American Psychological Association.
- Sandoz, E.K., Wilson, K.G., Merwin, R.M., Kellum, K.K. (2013). Assessment of body image flexibility: The Body Image-Acceptance and Action Questionnaire. *Journal of Contextual Behavioral Science*, 2, 39-48.
- Sargeant, J. (2012). Qualitative research part II: Participants, analysis, and quality assurance. *Journal of Graduate Medical Education*, 4(1), 1-3.
- Saskatchewan Ministry of Education (a). (2010). Health education 2. Retrieved from https://www.edonline.sk.ca/webapps/moe-curriculum-BBLEARN/index.jsp?lang=en&subj=health_education&level=2.
- Saskatchewan Ministry of Education (b). (2010). Health education 3. Retrieved from https://www.edonline.sk.ca/bbcswebdav/library/curricula/English/Health_Education/Health_Education_3_2010.pdf
- Schonert-Reichl, K., & Lawlor, M. S. (2010). The effects of a mindfulness-based education program on pre- and early adolescents' well-being and social and emotional competence. *Mindfulness*, 1, 137–151.
- Segal, Z.V., Teasdale, J.D., Williams, J.M., & Gemar, M.C. (2002). The mindfulness-based cognitive therapy adherence scale: Inter-rater reliability, adherence to protocol and treatment distinctiveness. *Clinical Psychology & Psychotherapy*, 9(2), 131-138.
- Semple, R. J., Lee, J., Rosa, D., & Miller, L. (2010). A randomized trial of mindfulness-based cognitive therapy for children: Promoting mindful attention to enhance social-emotional

- resiliency in children. *Journal of Child & Family Studies*, 19, 218-229.
- Serwacki, M., & Cook-Cottone, C. (2012). Yoga in the schools: a systematic review of the literature. *International journal of yoga therapy*, 22(1), 101-110.
- Shapiro, S.L., Brown, K.W., & Biegel, G.M. (2007). Teaching self-care to caregivers: Effects of mindfulness-based stress reduction on the mental health of therapists in training. *Training and Education in Professional Psychology*, 1(2), 105-115.
- Shenton, A.K. (2004). Strategies for ensuring trustworthiness in qualitative research projects. *Education for Information*, 22, 63-75.
- Shriver, L.H., Harrist, A.W., Page, M., Hubbs-Tait, L., Moulton, M., & Topham, G. (2013). Differences in body esteem by weight status, gender, and physical activity among young elementary school-aged children. *Body Image*, 10, 78-84.
- Smith, J.A. and Osborn, M. (2003). *Interpretative phenomenological analysis*. In Smith, J.A., editor, *Qualitative psychology: a practical guide to methods*. Sage.
- Smith, S. E. (2010). To Be Wise and Kind: A Buddhist Community Engagement with Victorian State Primary Schools. Doctoral Dissertation. <http://vuir.vu.edu.au/id/eprint/15538>
- Smith, S. E. (2013). *Buddhist Voices in School*. Rotterdam, Netherlands: Sense Publishers. <http://dx.doi.org/10.1007/978-94-6209-416-1>
- Snel, E. (2013). *Sitting Still Like a Frog: Mindfulness Exercises for Kids (and Their Parents)*. Boston, MA: Shambhala Publications.
- Spielberger, C. D. (2010). *State-Trait anxiety inventory*. John Wiley & Sons, Inc.
- Steensma, T. D., McGuire, J. K., Kreukels, B. P., Beekman, A. J., & Cohen-Kettenis, P. T. (2013). Factors associated with desistence and persistence of childhood gender dysphoria: a quantitative follow-up study. *Journal of the American Academy of Child & Adolescent Psychiatry*, 52(6), 582-590.
- Strasburger, V.C., Hogan, M.J., Mulligan, D.A., Ameenuddin, N., Christakis, D.A., Cross, C., Fagbuyi, D.B., & Moreno, M.A. (2013). Children, adolescents, and the media. *Pediatrics*, 132(5), 958-961.
- Stratton, S.P. (2015). Mindfulness and contemplation: Secular and religious traditions in Western context. *Counseling and Values*, 60(1), 100-118.

- Swami, V., Salem, N., Furnham, A., & Tovée, M.J. (2008). Initial examination of the validity and reliability of the female photographic figure rating scale for body image assessment. *Personality and Individual Differences*, 44, 1752-1761.
- Swami, V., Stieger, S., Harris, A.S., Nader, I.W., Pietschnig, J., Voracek, M., & Tovée, M.J. (2012). Further investigation of the validity and reliability of the Photographic Figure Rating Scale for body image assessment. *Journal of Personality Assessment*, 94, 404-409.
- Swanson, S.A., Crow, S.J., Le Grange, D., Swendsen, J., & Merikangas, K.R. (2011). Prevalence and correlates of eating disorders in adolescents. Results from the national comorbidity survey replication adolescent supplement. *Archive of General Psychiatry*, 68(7), 714-723.
- Tandoc, E.C., Ferrucci, P., & Duffy, M. (2015). Facebook use, envy, and depression among college students: Is facebooking depressing?. *Computers in Human Behavior*, 43, 139-146.
- The Hawn Foundation. (2011). *The MindUP curriculum: Brain-focused strategies for learning and living*. New York: Scholastic.
- Thompson, J. K., van den Berg, P., Roehrig, M., Guarda, A. S., & Heinberg, L. J. (2004). The sociocultural attitudes towards appearance scale-3 (SATAQ-3): Development and validation. *International Journal of Eating Disorders*, 35(3), 293-304.
- Tiggemann, M. (2014). The status of media effects on body image research: Commentary on articles in the themed issue on body image and media. *Media Psychology*, 17(2), 127-133.
- Tiggemann, M., Coutts, E., & Clark, L. (2014). Belly dance as an embodying activity?: A test of the embodiment model of positive body image. *Sex Roles*, 71(5-8), 197-207.
- Tiggemann, M., & Slater, A. (2013). NetGirls: The Internet, Facebook, and body image concern in adolescent girls. *International Journal of Eating Disorders*, 46(6), 630-633.
- Trochim, W.M.K. (2006). *Qualitative validity*. Retrieved from <http://www.socialresearchmethods.net/kb/qualval.php>
- Tucker, L.A. (1981). Internal structure, factor satisfaction, and reliability of the Body Cathexis Scale. *Perceptual & Motor Skills*, 53, 891-896.
- Tylka, T.L. & Wood-Barcalow, N.L. (2015). The Body Appreciation Scale-2: Item refinement and psychometric evaluation. *Body Image*, 12, 53-67.

- van den Berg, P. A., Mond, J., Eisenberg, M., Ackard, D., & Neumark-Sztainer, D. (2010). The link between body dissatisfaction and self-esteem in adolescents: Similarities across gender, age, weight status, race/ethnicity, and socioeconomic status. *Journal of Adolescent Health, 47*(3), 290-296.
- Vander Wal, J.S. & Thelen, M.H. (2000). Predictors of body image dissatisfaction in elementary-age school girls. *Eating Behaviors, 1*, 105-122.
- van de Weijer-Bergsma, E., Langenberg, G., Brandsma, R., Oort, F.J., & Bögels, S.M. (2014). The effectiveness of a school-based mindfulness training as a program to prevent stress in elementary school children. *Mindfulness, 5*, 238-248.
- Van Strien, T., Frijters, J. E. R., Bergers, G. P. A., & Defares, P. B. (1986). Handleiding De Nederlandse vragenlijst voor eetgedrag.
- Viafora, D.P., Mathiesen, S.G., Unsworth, S.J. (2014). Teaching mindfulness to middle school students and homeless youth in school classrooms. *Journal of Child and Family Studies, 24*, 1179-1191.
- Vohs, K.D. & Baumeister, R.F. (2004). *Understanding self-regulation*. In Baumeister R.F., Vohs K.D. (Eds.), *Handbook of self-regulation* (pp. 1-12). New York, NY: Guilford.
- Wanden-Berghe, R.G., Sanz-Valero, J., & Wanden-Berghe, C. (2010). The application of mindfulness to eating disorder treatment: A systematic review. *Eating Disorders, 19*(1), 34-48.
- Wall, R.B. (2005). Tai Chi and mindfulness-based stress reduction in a Boston public middle school. *Journal of Pediatric Health Care, 19*(4), 230-237.
- Walsh, R., & Shapiro, S.L. (2006). The meeting of meditative disciplines and Western psychology: a mutually enriching dialogue. *American Psychologist, 61*(3), 227.
- Watson, D., & Clark, L.A. (1999). The PANAS-X: Manual for the positive and negative affect schedule-expanded form.
- Wenig, M. (2014). *YogaKids: Educating the whole child through yoga*. Abrams.
- Wentzel, K.R., & Muenks, K. (2016). Peer influence on students' motivation, academic achievement, and social behavior. *Handbook of Social Influences in School Contexts: Social-Emotional, Motivation, and Cognitive Outcomes*, 13-30.
- Wester, K. (2011). Publishing ethical research: A step-by-step overview. *Journal of Counselling and Development, 89*(3), 301-307.

- Wheeler, E.A. (2015). Brief compassion meditation and recall of positive-emotion words. *Journal of Articles in Support of the Null Hypothesis*, 11(2), 11-20.
- White, L. S. (in press). Reducing stress in school-age girls through mindful yoga. *Journal of Pediatric Health Care*. doi:10.1016/j.pedhc.2011.01.002
- Will, A., Rancea, M., Monsef, I., Wöckel, A., Engert, A., Skoetz, N. (2015). Mindfulness-based stress reduction for women diagnosed with breast cancer. Doi: 10.1002/14651858.CD011518
- Williams, J. M. G. (2010). Mindfulness and psychological process. *Emotion*, 10(1), 1.
- Willis, E. & Dinehart, L.H. (2013). Contemplative practices in early childhood: implications for self-regulation skills and school readiness. *Early Child Development and Care*, 184(4), 487-499.
- Woodyard, C. (2011). Exploring the therapeutic effects of yoga and its ability to increase quality of life. *International journal of yoga*, 4(2), 49.
- Wrigley, W.J. & Emmerson, S.B. (2011). The experience of the flow state in live music performance. *Psychology of Music*, 41, 292-305.
- Yager, Z., Diedrichs, P.C., Ricciardelli, L.A., & Halliwell, E. (2013). What works in secondary schools? A systematic review of classroom-based body image programs. *Body Image*, 10, 271-281.
- Zabinski, M.F., Calfas, K.J., Gehrman, C.A., Wilfley, D.E., & Sallis, J.F. (2001). Effects of a physical activity intervention on body image in university seniors: Project GRAD. *Annals of Behavioral Medicine*, 23(4), 247-252.
- Zelazo, P. & Lyons, K. (2011). Mindfulness training in childhood. *Human Development*, 52(2), 61-65.
- Zenner, C., Herrnleben-Kurz, S., & Walach, H. (2014). Mindfulness-based interventions in schools – a systematic review and meta-analysis. *Frontiers in Psychology*, 5, 1-20.

Elementary Teacher Experiences Using Mindfulness Practices to Target Body Image Concerns



PARTICIPANTS NEEDED FOR RESEARCH IN *MINDFULNESS EDUCATION*

We are looking for volunteers to take part in a study exploring how elementary teachers use mindfulness in their classrooms and its application to body esteem.

- *Are you an elementary educator using Mindfulness within your classroom?*
- *Has Mindfulness been in your classroom for at least 8 weeks?*
- *Would you be willing to discuss your experiences using mindfulness in a confidential research interview?*

Your participation would involve 2 interview sessions, each of which is approximately 45-60 minutes.

In appreciation for your time, you will receive a \$25 gift card.

For more information about this study, or to volunteer for this study, please contact:

Alyssa Kluk

at

Email: ark037@mail.usask.ca

This study has been reviewed by, and received approval through, the Research Ethics Office, University of Saskatchewan.



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Appendix B
Participant Consent Form



Department of Educational Psychology & Special
Education
Education Building Room 3021
28 Campus Drive, Saskatoon, SK, S7N 0X1
Telephone: (306) 966-5255 Fax: (306) 966-7719

Participant Consent Form

You are invited to participate in a research study entitled: “Elementary Teacher Experiences Using Mindfulness Practices to Target Body Image Concerns”

Researcher: Alyssa Kluk (B.Sc. Psych, Graduate Student), Department of Educational Psychology & Special Education, University of Saskatchewan (email: ark037@mail.usask.ca, phone: 306-715-9767)

Supervisor: Dr. Laureen McIntyre (Thesis Supervisor), Department of Educational Psychology & Special Education, University of Saskatchewan

Purpose(s) and Objective(s) of the Research:

The purpose of the research is to explore the use of mindfulness within elementary classrooms and advance understanding of how mindfulness may be used and tailored to improve the body image of elementary student participants.

Procedures:

You are being asked to participate in one 60-90 minute interview and one follow-up meeting. All interviews will be conducted at a time and place that is accessible for you. The interviews will be audio-recorded via computer software. During the interview, you are encouraged to speak freely and honestly about your experiences using mindfulness.

- It is your right as a participant to withdraw your participation from the study at any time. You are encouraged to ask questions or for clarification of the study's goals, procedures, and your role at any time.
- It is your right as a participant to request that the recorder within the interview be turned off at any time.
- Interviews will be transcribed with all names being changed to pseudonyms (different names) to protect your confidentiality. You are asked to refrain from using any individual students' names within the interview. However, if a name is mentioned it will also be changed to a pseudonym to protect the child's identity.
- The data will be analyzed alongside the other participants' data for themes or patterns and will be presented in a manner that supports confidentiality and anonymity.
- You will be provided with a shortened version of the interview at our follow-up meeting, which is expected to take 30 minutes to 1 hour. The information from your recordings will only be shared amongst the researcher and the thesis supervisor.
- The findings of this study will be primarily used for the completion of my thesis requirements for my graduate program. However, the de-identified findings may also be provided in small meetings or in future publications.

Potential Risks:

Any risks related to participation in this study are low. It is possible that you may feel discomfort from your participation in this study. In addition, despite measures to protect your confidentiality (i.e., changing your name, removing demographics, not listing your school division or city/town), it is always possible that individuals reading future publications of these findings may draw links to your participation. This is, however, unlikely. To address these risks, the interview will be approached sensitively and respectfully. Throughout the process, your continued participation will remain your choice and you can choose to withdraw from the study at any point that you feel uncomfortable. It is always your choice to not answer a question or to end a discussion. You are encouraged to ask questions at any point within the interview and to contact the researcher or the supervisor at any point following the interview sessions. If you feel negatively toward the study and would prefer to discuss these feelings elsewhere, you may contact

Saskatoon Mobile Crisis Intervention

Telephone: 306-933-6200

The Mobile Crisis Intervention Centre is a 24-hour telephone counselling service for individuals that are in distress or are experiencing a crisis moment within their lives. The counsellors are willing to visit individuals in their homes if this is desired and convenient.

Potential Benefits:

Being able to talk about your experiences using mindfulness within your classroom may help you to gain insight into your current use of mindfulness with your students and may allow you to examine this use in a novel way. Additionally, you will be contributing to a new area of research that has the potential of improving mindfulness programs for children in the future as an aid to developing a more positive body image.

Compensation:

As a token of appreciation for your time and insight, you will be provided with a \$25 gift card to a bookstore of your choice. Additionally, any costs that you incur for parking will be covered.

Confidentiality:

To protect your confidentiality and anonymity: transcripts and summaries of interviews will be (a.) password protected on the researcher's computer and stored on the University of Saskatchewan Secure Cabinet on PAWS, (b.) a coding system will be used to keep your name and contact information separate from data collected during the interviews with the data link being destroyed upon completion of data collection, (c.) any potentially identifying information will be altered to support anonymity, and (d.) you will have the opportunity to review the final transcript and summary of your sessions where you will be asked to sign a data release form authorizing its use in future presentations and/or publications.

Although excerpts from your interviews will be shared with the public, your name and identifying information will be altered through the use of a pseudonym and omission of details. It will not be possible to connect your name as signed on the data release form with the information that you provided as they will be maintained separately. The interview tapes will not be identified using your real name. If you are concerned that any part of the interview may be identifiable, you have the right to choose to add, change, or delete any information from the transcript, as it may otherwise be used for the thesis report or the shortened interview.

Storage of Data: To protect your privacy, the information obtained during this study will be stored in a locked filing cabinet in Dr. Laureen McIntyre's (the thesis supervisor's) office. After 5 years, the data is no longer required and will be destroyed.

Right to Withdraw: Your participation is voluntary and you can answer only those questions that you are comfortable with. You may withdraw from the research project for any reason, at any time without explanation or penalty of any sort. Your right to withdraw from the study will apply until the results have been summarized, at which point the data will be separate from your real name.

If you do decide to leave the study, you will not be affected professionally or personally in any way. Any information that you have provided will be destroyed upon exit. Your right to remove your information will continue until the document has been completed and been made available to the public. After this point, it may not be possible to remove your information from the study.

Follow up:

- If you wish to obtain results from the completed study, please provide your email address that the researcher can send a copy of the report through.

Email address

Questions or Concerns:

Feel free to contact the researcher or the supervisor at any time throughout and following the study if questions or concerns arise. You can contact the researcher (Alyssa Kluk) through email at ark037@mail.usask.ca or through phone at 306-715-9767 and the supervisor (Dr. Laureen McIntyre) at 306-966-5266.

This research project has been approved on ethical grounds by the University of Saskatchewan Research Ethics Board (**Beh 17-71**). Any questions regarding your rights as a participant may be

addressed to that committee through the Research Ethics Office ethics.office@usask.ca (306) 966-2975. Out of town participants may call toll free (888) 966-2975.

Consent to Participate: Your signature below indicates that you have read and understand the description provided; I have had an opportunity to ask questions and my/our questions have been answered. I consent to participate in the research project. A copy of this Consent Form has been given to me for my records. During your follow-up session, the information from this consent form will be reviewed and any questions regarding your rights as a participant, your role in the study, or the purpose of this study will be addressed.

_____	_____	_____
<i>Name of Participant</i>	<i>Signature</i>	<i>Date</i>
_____	_____	
<i>Researcher's Signature</i>	<i>Date</i>	

Appendix C

Interview Guide

Interview Questions

1. Please describe the population with whom you work (i.e., adults, children, special needs, etc.).
2. How do the children in your class typically mention feeling about themselves and their bodies?
3. If they don't mention how they feel, do you believe there is any body negativity among your students? Why do you believe this (e.g., their actions, the way they dress)?
4. How long have you been using mindfulness-based interventions in your work?
5. How did you decide to incorporate mindfulness programming for children into your repertoire?
6. What does a typical mindfulness session look like in your classroom/studio?
7. How did you adapt your mindfulness programming for use with children? (What do you do to ensure that the children can follow along with the task?)
8. How do the children respond to mindfulness practice?
9. Are there observable benefits or drawbacks?
10. Does your mindfulness practice have a focus on the body or self-acceptance? If so, how?
11. In what ways do you feel that mindfulness practice has impacted the children's self-esteem in relation to their bodies, if at all?
12. What does mindfulness mean to you?
13. Describe your personal experience with mindfulness.
14. How has your experience been in providing mindfulness services for children?

Appendix D
Data Release Form

Data/Transcript Release Form

I, _____, hereby authorize the release of the transcript and transcript summary of my interview to Dr. Laureen McIntyre and Alyssa Kluk to be used in the manner described in the consent form.

PLEASE CHECK ONE OF THE FOLLOWING OPTIONS:

____ I authorize the release of data without reviewing the transcript/transcript summary from my interview with the student researcher.

____ I authorize the release of data only after I have been provided the opportunity to review, add, alter, or delete information as appropriate from the transcript/transcript summary of my interview with the student researcher.

I acknowledge that the transcript/transcript summary accurately reflects what I said in my interview. I have received a copy of the Data/Transcript Release Form for my own records.

Participant

Date

Student Researcher

Date